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Railway Age

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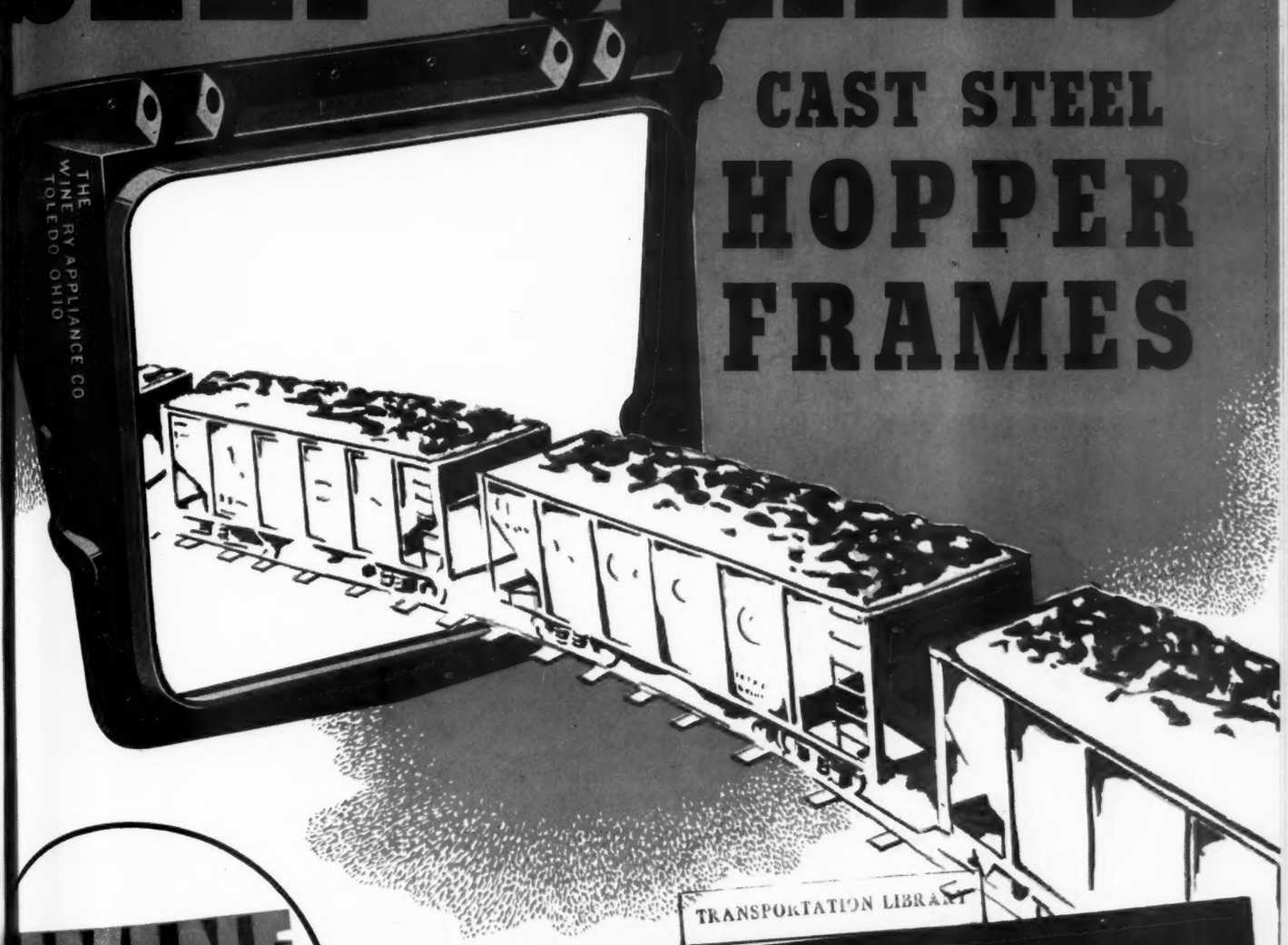

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Make each foreman responsible for preventing waste in his department.

Enforce monthly rechecks in every department to find scrap material previously overlooked.

Report regularly on your plant's collection of scrap to the Industrial Salvage Committee set up by WPB in your community.

•

SUPERINTENDENT, FOREMAN, OR TECHNICIAN:

Survey all plant equipment, particularly idle, broken, or obsolete machines, and determine what might be salvaged, and what should be scrapped. Remember, any machine is more valuable repaired than scrapped.

Classify all scrap metal by its alloy content.

Provide separate containers, clearly marked for each class of scrap material.

Speed the return of scrap to steel mills through existing channels.

•

WORKMAN:

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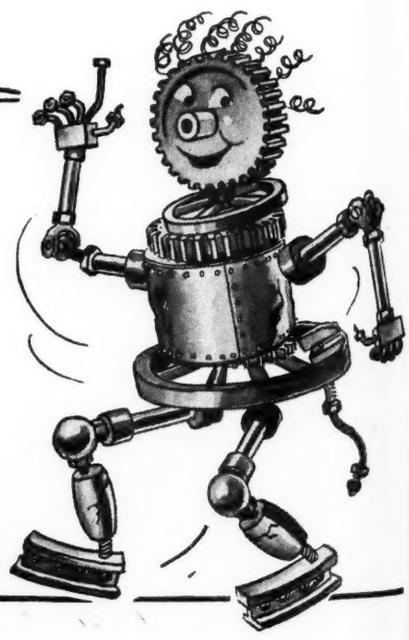
Yes sir, we've got to have scrap. It takes scrap to make steel. And it takes lots of steel to win a war. DO YOUR PART!



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Published weekly by Simmons-Boardman Publishing Corporation, 1309 Noble Street, Philadelphia, Pa. Entered as second class matter, January 4, 1933, at the Post Office at Philadelphia, Pa., under the act of March 3, 1879. Subscription price $6.00 for one year U. S. and Canada. Single copies, 25 cents each. Vol. 114, No. 6.

Railway Age

With which are incorporated the Railway Review, the Railroad Gazette and the Railway Age-Gazette. Name registered U. S. Patent Office.

Vol. 114 February 6, 1943 No. 6

PUBLISHED EACH SATURDAY BY THE SIMMONS-BOARDMAN PUBLISHING CORPORATION, 1309 NOBLE STREET, PHILADELPHIA, PA., WITH EDITORIAL AND EXECUTIVE OFFICES AT 30 CHURCH STREET, NEW YORK, N. Y., AND 105 W. ADAMS STREET, CHICAGO, ILL.

WASHINGTON, D. C.: 1081 NATIONAL PRESS BUILDING. CLEVELAND: TERMINAL TOWER. SEATTLE: 1038 HENRY BUILDING. SAN FRANCISCO: 300 MONTGOMERY STREET, ROOMS 805-806. LOS ANGELES: 530 WEST 6th STREET.

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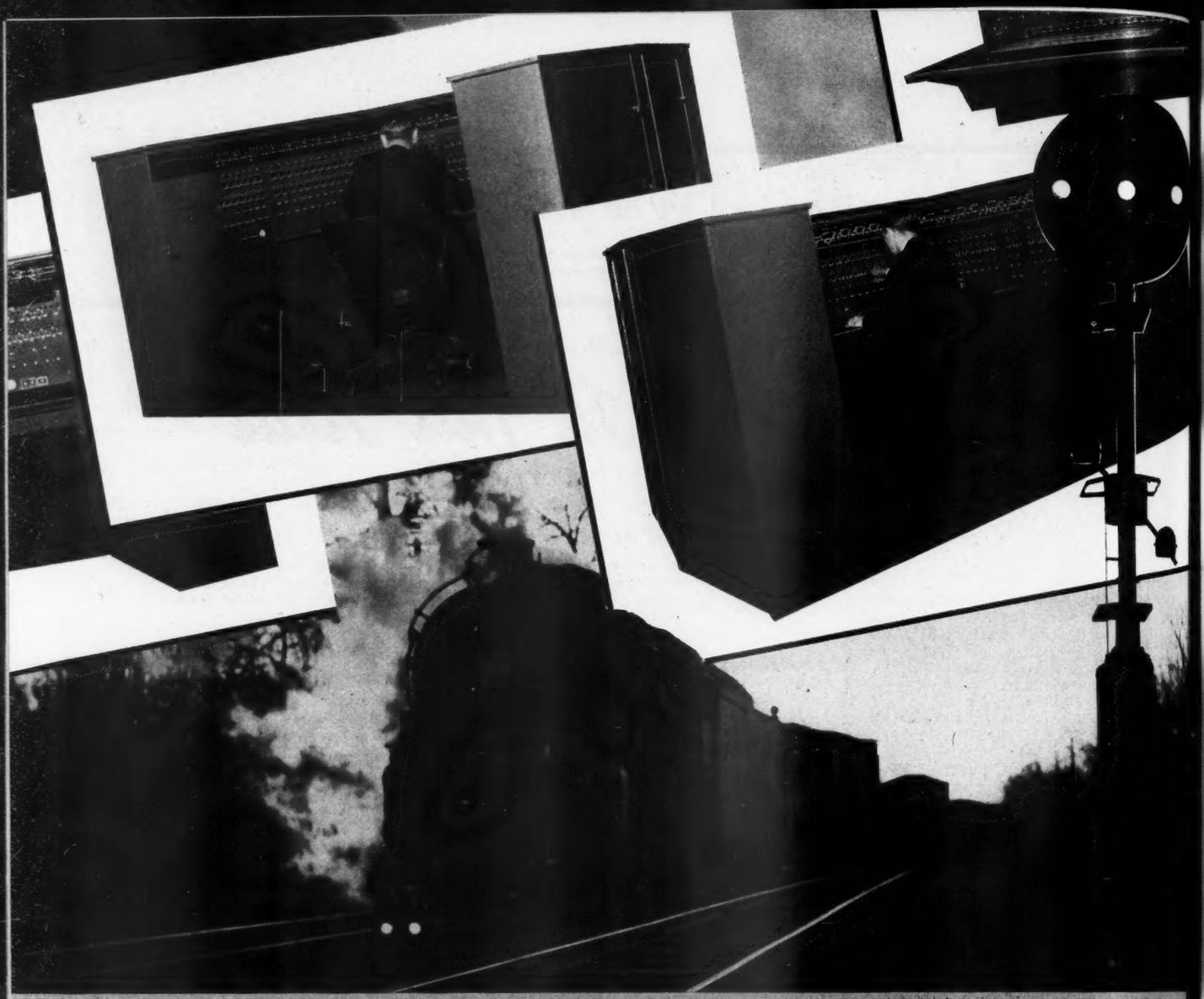

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Well-planned C.T.C. systems can be constructed in a comparatively short period of time. They achieve immediate results which completely justify the relatively small amount of critical material required.

*"... . The Centralized Traffic Control installed in 1942 and that scheduled for 1943 will be approximately 1600 miles, which is about 60 per cent of the total mileage installed prior to 1942." —from an editorial in the January 2, 1943 issue of Railway Age.

Many Centralized Traffic Control installations are efficiently handling more than double the normal amount of traffic without delays or congestion.

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The Week at a Glance

HOW TO PROPHESY: In a communication in this issue Dr. Ralph Watkins of the National Resources Board attempts a defense of the report recommending socialization of the railroads, his argument being premised on the assumption that private capital will no longer finance them. On another page the rate hearings are reported—wherein a companion branch of the bureaucracy, the OPA, is trying to beat down railroad earnings after the first year in 13 that they have attained a reasonable ratio to investment. In predicting that railroads will no longer attract private capital, the New Deal is thus taking active steps to make its prophecy come true—like the crystal gazer who foretells that a client is going to have his pocket picked, and then picks it himself.

●

ATTACK ON EARNING POWER: The railroads are profiteers, because of the rate increase awarded to them a year ago. Not only must the I. C. C. wipe out that increase, but it should also reduce rates below the pre-war level. Even if wages are substantially increased, rates should still be drastically lowered. Such were the contentions of a lawyer named Max Swiren—hired by the OPA commandos in their move to destroy the railroads' earning power—in opening the attack on railroad rates before the I. C. C. this week, as reported herein. Max the lawyer then put a pedagogue on the stand who proceeded to lecture the bench on what constitutes a fair return, but he drew out "the thread of his verbosity finer than the staple of his argument," because, under questioning, this expert had to admit his ignorance of what the 1940 Transportation Act provided on this score.

●

EXPERTS IN NUDISM: The criticism by Congressman Martin Dies directed at the employment of an economist, allegedly an authority on nudism, by the Railroad Retirement Board, may appear somewhat misplaced. The Board, after all, is committed to denuding the coffers of the railroads and the unemployment fund, in the interest of ever-larger benefits. It may be that they have been able to make effective use of advice by an expert who understands how to carry the peeling process to the ultimate.

●

AVIATION, LUSTY WAR BABY: When there is a new arrival in a family, thoughtless parents occasionally neglect their older offspring—who, maybe, have as much to contribute to the family's felicity as the newcomer; possibly even more. Schoolmarms alert for the latest sensation are getting new textbooks, which intermingle "air-mindedness" with the three R's. War movies and news, when they get down to facts instead of speculation, are almost exclusively devoted to the truly great exploits of the air arm. The aviation industry itself is getting its present laudable story told in free space, while it devotes its paid advertising to extended and sagacious promotion of its *future* well-being. The leading editorial herein suggests that the policy—quite well recognized a year or two ago—of *equal governmental treatment* of all transportation agencies stands in some danger of a mauling at the hands of the little stranger.

●

5 LOCOS AT PRICE OF 3: Getting three new locomotives, but actually having 5 additional engines by the purchase—such is the result of applying Diesel switchers in the proper locations to release steam power for road work. The possibilities inherent in this substitution are analyzed in an article herein by A. H. Candee, transportation engineer of Westinghouse Electric. The way this result is secured, of course, is by getting more work out of the Diesel in switching service than a steam engine can perform. This outcome is not possible, of course, in all situations—but the author believes the opportunity occurs more frequently than is ordinarily supposed, and gives his reasons.

●

PULLMAN ARGUMENT ENDS: The Department of Justice completed its anti-trust case against Pullman this week before the Circuit Court of Appeals in Philadelphia, when both sides presented their arguments. Thurman Arnold's view, apparently, is that multitudinous competition must be enforced even where integration is "natural"—while Pullman believes that no unlawful monopoly exists where there is no power of excluding others from the field.

●

TRANSPORT PRIORITIES: The WPB claims to have perfected a device, or gimmick, by which it can control transportation without a by-your-leave to the ODT. This apparatus, or "framework" as WPB calls it, so far applies only to the non-petroleum use of tank cars and tank trucks but, says WPB, by use of this contraption "any type of shipment can be regulated as the need may arise." The first order issued under this procedure is called "General Transportation Order T-1," and the means by which ODT has been set out is the direction of the limitation to shippers, rather than carriers. A news report on this order-in-council appears elsewhere herein, it having been elucidated to the press by the head stockpiling and transportation authority of the WPB, to wit, Dr. W. Y. Elliott—who, prior to his achievement of *ex officio* expert status in transportation, was a teacher of government at Harvard.

●

CMP NOW GOING ON: The Controlled Materials Plan — latest WPB scheme of allocating scarce materials — is now being put into effect, as a news report herein reveals. The ODT is one of the "claimant agencies" entitled to put in its bid under the plan. However, it has been revealed, the claimant agencies' demands exceeded the supplies of various critical items by 14 to 17 per cent—and transportation is not one of the "must" programs which get first attention.

COINCIDENCE?: Every time the sirs and brothers have a wage case pending, it so happens that, just then, the Retirement Board puts out some artistic figures on "average" railway wages — an "average" computed by dividing total annual pay by the number of people who worked—even for a day—during the year. The Board also excludes all pay earned in excess of $300 a month. By this process of statistical legerdemain an "average" annual wage of $1,311 is announced—an "official" tool ready-made for deceptive demagogy. Their alleged "average" wages are not much more than some of the boys will be paying in income taxes, if the Treasury's plans are accepted.

●

GOING TO ENGLAND?: Officers of the Transportation Corps and Canadian army transport officers who find themselves in London are assured of a pleasant welcome at a club provided for them by the generosity of the British railways. As related in the news pages herein, the club was opened on New Year's Day with Chairman W. A. Harriman of the U. P. among the Americans on hand.

●

SURPLUS MANPOWER: An adequate crew for a freight train consists of one conductor and two brakemen. At the middle of last September there were 22,036 freight conductors working on the railroads. Twice that number, or 44,072, should have been a sufficient force of freight brakemen but, actually, 10,056 more freight brakemen than that were employed. By similar examination of each different category of train, engine and yard service employees, an editorial herein reaches the conclusion that the equivalent of 38,000 additional employees could be provided by eliminating jobs where no necessary work is performed, and by increasing subnormal hours to 48 per week.

●

MANN ON MATERIALS: The folks who have the privilege of praising the railroads for past record-breaking performance have a rather easier job of it than the ones on the firing line who have to produce those records. One such latter group is the purchasing department—and what its present and coming worries are were gone over at the Western Railway Club this week, at a meeting reported elsewhere in this issue and commented upon further in the editorial pages. The situation was canvassed in a paper by Vice-President A. C. Mann of the I. C., and in discussion by other speakers.

●

FILL REPLACES VIADUCT: Faster service for war traffic and scrap for munitions has been provided by a large embankment built over a double-arch concrete culvert—the new construction replacing a double-track steel viaduct. The improvement is the joint job of the Pennsylvania and Nickel Plate, and is described in an illustrated article herein.

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RAILWAY AGE

Efficiency FOR VICTORY

Acclaiming A War Baby

It was remarked by Shakespeare that "all with one consent praise new-born gawds," and that "things in motion sooner catch the eye than what not stirs."

Current agitation respecting post-war aviation corroborates the timeless truth of the poet's insight. School textbooks are being rewritten to make the pupils "air-minded." Fully half of the propaganda movies being issued under governmental auspices appear to be concerned with the air arm of the services. Films produced to advance the civil aeronautics program have instilled the conviction in the minds of millions of young people that profitable life careers await them in aviation.

The aviation industry—in both its manufacturing and operating branches—is using some of the large income it is receiving from war orders to conduct the greatest, most skillful and most foresighted advertising campaign ever conducted by any industry—in the natural effort to maintain its post-war magnitude and profitability on a wartime level, if possible.

In Congress a minority of enthusiastic representatives are vying with each other to see which can show the greater zeal for this vigorous, new transportation agency. They want to establish an aviation committee in Congress—frankly for purely promotional purposes, as if the private interests in aviation were not already doing a job of such magnitude and competence in this field as to dwarf all such previous efforts.

A few years ago it looked as if thoughtful men in Congress and elsewhere in government had come to an understanding that transportation—by whatever agency provided—was one and the same commodity as far as the public is concerned; and that a reasonable government policy toward transportation required that public aid or regulation of all transportation agencies should be equal. The reasoning in support of such a policy is the obvious public interest in having transportation performed by the intrinsically most efficient and economical agency in each case, and the impossibility of public choice of the most efficient and economical agency if one or more is more helped or handicapped by government than the others.

Such reasoning led to the passage of the Transportation Act of 1940, after such protracted, intelligent and conscientious work by the Senate and House interstate commerce committees as has not often been recorded in the annals of legislation. Such reasoning lies behind the assignment upon which the Board of Investigation & Research is now engaged. However inadequately the National Resources Board did its job of inquiring into and reporting upon national transportation policy, it also conformed to the logic of *uniform treatment* of all transportation agencies.

Commercial aviation has economic merits entitling it to healthy post-war growth. Since it does not offer entirely or even largely to replace other forms of transportation with superior economy, its development, in the national interest, should take place under the same treatment as to governmental regulation, public aid and promotion as are accorded to other transportation agencies. The nation is quite truly informed that it will neglect adequate development of aviation to its loss and peril. It will incur the same loss and peril if, in its enthusiasm for the new baby, it should let the others starve.

Increasing Manpower by Relaxing Working Rules

Conferring under the auspices of the Office of Defense Transportation, agreement has been reached by committees representing railroad management and the labor unions on a 13-point program for alleviating the manpower shortage during the war. No contracts are changed. The agreement simply accepts the patriotic principle that in a period of national emergency and manpower shortage such as the present, contracts and rules should be so relaxed that needed increases in employment can be made, and that persons employed in an industry where they are not needed can be transferred where they are needed.

Among the rules affecting train service to be relaxed are those preventing yard crews delivering cars from also hauling cars back to their own roads, and those imposing hourly limitations in yards and limiting the mileage that road crews can run within defined periods.

Examination of Interstate Commerce Commission wage and hours statistics, in the light of present operating and other conditions, discloses substantial surpluses of manpower in train and engine service—surpluses of which some railroads need to avail themselves, but heretofore could not because of union agreements and "full" crew laws. An accompanying table gives the number of employees in each branch of train service as of the middle of September, 1942, and a computation of the average weekly hours actually worked by each during that month.

By an agreement with the firemen's organization made in 1937, "firemen" are required on Diesel-electric locomotives weighing more than 90,000 lb., and on all Diesel-electrics in so-called "streamlined" service. It has long been the practice to employ "firemen" on electric locomotives, although it would be difficult to name any indispensable service they perform which could not be rendered without hardship by other employees. In September only 69 per cent of passenger motive-power-miles were performed by steam locomotives actually requiring the service of a fireman. Therefore, the railroads apparently could have got along with only 6,650 firemen, whereas they actually employed 8,766—an excess of 2,116.

Moreover, the firemen's organization is insisting, in a case now pending, that "firemen" be used on all Diesels, regardless of weight. Indeed, they want a "fireman" on each "unit" of a Diesel locomotive. Many of these locomotives comprise two, three and even four "units." In other words, this labor organization, not content with the one supernumerary employee now usually on a Diesel locomotive, has been seeking to require that two, three or even four such supernumeraries should be employed.

In yard engine service last September, only 83 per cent of the motive-power-miles were performed by steam engines actually needing a fireman. The railroads could, therefore, have got along in yards with 83 per cent as many firemen as they had engineers. That is, they employed 20,523 yard firemen when 15,899 would have sufficed—a surplus of 4,624.

In local freight train service both engine and train crews work relatively long hours. But not so on through freights. If engineers and firemen on through freight trains were to work 48 hours, on the average, per week —instead of the 45 and 40.2 hours, respectively, which they worked last September—there would be sufficient additional service hours available to provide the equivalent of 5,834 additional employees.

In freight train service there has been a large wastage of manpower by reason of "full" crew laws and union agreements. An adequate crew in freight service includes one conductor and two brakemen. As the table shows, there were 22,036 freight conductors (local and through) in service last September. Twice that number, or 44,072 brakemen, should have been sufficient. There were 10,056 more freight brakemen employed than would have been necessary to have staffed all trains operated with adequate crews.

In yard service, a conductor and two brakemen are an adequate *average* crew. The number of instances in which three brakemen might be used to advantage is offset by at least an equal number of instances in which one conductor and one brakeman would be sufficient. There were 20,148 yard conductors employed last September, and twice that number of yard brakemen should have sufficed. Actually, 11,179 more than that number were employed.

All passenger train service employees, except as-

Number and Average Weekly Hours of Train and Engine Service Employees in September, 1942

Occupation	Number Employed Middle of Month	Avg. Weekly Hours Actually Worked Incl. Overtime	Occupation	Number Employed Middle of Month	Avg. Weekly Hours Actually Worked Incl. Overtime
Passenger Engineers	9,624	35.9	Asst. Psgr. Conductors	1,625	52.8
Passenger Firemen	8,766	37.7	Passenger Baggemen	3,844	40.6
Yard Engineers	19,132	48.9	Passenger Brakemen	10,272	37.8
Yard Firemen	20,523	46.5	Through Freight Conductors	14,396	47.7
Through Freight Engineers	20,738	45.0	Local Freight Conductors	7,640	63.3
Local Freight Engineers	8,161	61.7	Through Freight Brakemen	35,922	42.3
Through Freight Firemen	23,015	40.2	Local Freight Brakemen	18,206	58.4
Local Freight Firemen	8,433	58.1	Yard Conductors	20,148	51.6
Passenger Conductors	7,475	41.6	Yard Brakemen	51,475	46.0

Average weekly hours computed from I. C. C. Statement M-300 by totaling straight time hours actually worked and ⅓ of overtime hours paid for; dividing that total by number of employees at middle of month; and dividing the result by 4.333, to put the monthly averages on a weekly basis. In the case of passenger service employees, overtime hours paid for are used in the total, rather than ⅓ thereof, since overtime in such service is paid for *pro rata* (not time-and-a-half as in freight and yard service).

sistant conductors, are shown in the table to have worked average weekly hours substantially less than 48. If hours worked by these employees were increased to 48 per week, additional service hours equivalent to 4,617 more employees would be available.

It appears from the above computations alone that last September there were 12,000 more enginemen, almost 15,000 more trainmen and over 11,000 more switchmen employed than were needed. Many or most of them may be needed in future as traffic increases; but needed manpower can best be supplied by having them do more work where they are or by shifting them to where the demand for manpower exceeds the supply.

The foregoing computations do not by any means exhaust the possibilities. They do not, for instance, include any estimate of unnecessary hours now being worked by reason of decisions of referees of the National Railroad Adjustment Board which prevent road crews from doing yard work, and vice versa. They raise no question concerning excessive train crews in passenger service, and they do not enumerate the unnecessary "firemen" on Diesel or electric *freight* locomotives.

"Oats for the Iron Horse"

Addressing an audience of more than 800 at a "Purchases and Stores night" meeting of the Western Railway Club, Chicago, on February 1, A. C. Mann, vice-president of the Illinois Central System, reviewed the functioning of the railway procurement departments in wartime, under the allegorical title "Oats for the Iron Horse." In handling the greatest transportation job of all time the railways have established their record through the co-operation of their various departments. Charged with the tremendous task of supplying the railways with all the varied materials and commodities that they need, the purchases and stores departments have exhibited the co-ordinated teamwork that is so necessary to successful transportation and in preparation for the greater tasks that lie ahead.

Established essentially as service organizations to purchase, store and handle materials efficiently, the railway procurement departments have expanded the scope of their activities to include the delivery of materials directly to the users, the promotion and adoption of standard packages, the extensive reclamation of materials and the collection and handling of scrap. The direct results of these activities include better service of supply, the filling of requisitions more intelligently, the reduction of handling costs to a minimum and maintaining well balanced inventories.

Individually and collectively, purchasing and stores departments have co-operated with the authorities in Washington with little complaint about the vast increase in the volume of work occasioned by government control of material deliveries, so long as the necessary materials have been forthcoming. Moreover, men of the purchases and stores departments have played a prominent part in the committees appointed to study the availability of and the formulation of plans for the adequate distribution of critical materials. Procurement officers are responsible in large measure for the successful drives for the collection of scrap as well as the promotion of the more extensive reclamation of materials. One of the outstanding contributions in this respect is the book devoted to the practical application of material reclamation, issued by Division VI, Purchases and Stores, A. A. R.

As another progressive step in the procurement of controlled materials, railway procurement officers have announced their intention of co-operating fully in the new Controlled Materials Plan which is now under test and is intended to remove the element of uncertainty in connection with the delivery of materials. Theoretically the plan has much to commend it, although rigid inventory controls, reducing inventories to as low as 60 days in some instances, may present difficulties in railway operation. Again the widely scattered organizations of railway procurement departments may present additional hazards.

Facing the unprecedented increase in railway traffic, Mr. Mann declared that it is logical to expect a corresponding increase in the maintenance of the railway plant and its equipment—demands which must be met with more materials and supplies during 1943. Although reasonably satisfactory results have been secured to date, it is evident that if the pace set by railway transportation is to be maintained, materials and supplies must be made available in sufficient quantities and within specific time limits to meet the stringent demands of all-out war.

Collectivism Now Aims at Control, Not Ownership Necessarily

"If private industry expects to survive the post-war years *as* private industry, it must do its own planning to meet the contingencies of that time. We are going to have—already have, in fact—a welter of plans from self-appointed authorities on the general welfare, each of which is based upon the theory that the government must control the national economy throughout the new 'emergency' that is to come with peace.

"Industrial management cannot leave this planning field to theorists or advocates of collectivism or professional officeholders. Master plans, prepared and administered by agencies of political origin, mean control of industry by such agencies—not merely regulation under specific provisions of law but widely discretionary power to say how the business man shall and shall not employ the private property in his charge.

"Time was when we thought that the *ownership* of property made the difference between the private enterprise system and any of the several forms of collectivism. We have learned, or should have learned by this time that modern collectivism, whether Fascist or Communist in name or form, concerns itself with *control* of property and cares nothing about ownership. . . ."

—From the Wall Street Journal.

The Diesel in Switching Service

Means of measuring economy of substitution of Diesels in yards are given, to release steam-power for road work

By A. H. Candee

Transportation Engineer, Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa.

THE One-Plus Locomotive is suggested as a name for the Diesel-electric switching locomotive, since one Diesel locomotive will do more work than one steam locomotive; the number of steam units released will be greater than the number of Diesels installed, sometimes in the ratio of 5 to 3, 3 to 2, 4 to 3, etc. If, then, these substitutions are spotted at points on the railroad where the steam power released is of a type suitable for road freight work, the use of one switching Diesel will result in the equivalent acquisition of one-plus road locomotives. This, of course, pre-supposes that the railroad has types of steam locomotives which have been set back from road work to switching at some time in the past. Where it is not feasible to substitute the Diesel directly for the road type of locomotive (such as when the latter is in single-trick service and the economies will not justify the change) it may still be possible to replace an eight-wheel switcher somewhere on the system and then interchange this with a road-type unit. In any event, the use of Diesels expands the switching capacity of the railroad in a ratio of more than one-to-one of the number of Diesels purchased.

The statements thus far have hinged upon the fact that a Diesel, if properly selected, will do more switching than the steam locomotive which it replaces. To most of those who have operated Diesels in congested yards, this is an obvious fact, but there are many men, unfamiliar with the Diesel in such type of operation, who are still skeptical. This, then, calls for further explanation.

Preparatory Time Curtailed

The Diesel time saving starts with the minute that a crew; reports on the locomotive for duty. While 10 to 15 min. is normally used by the crew of a steam locomotive to inspect and prepare for the day's work, the crew of the Diesel is usually ready to get to work within five minutes after getting aboard. This saving is repeated at the end of the trick. Furthermore, steam locomotives are usually assigned at the enginehouse and must move to the yard to start their work and then back again at the end of the trick, whereas a Diesel crew may be asked to report at the locomotive in the yard or on a track adjacent to the yard. By transferring the dispatch point in this way, considerable time is saved. Another time saving results from the fact that a Diesel does not require time out for replenishing the water supply, whereas the steam unit requires about 30 min. as a minimum, the time being dependent upon the congestion in the yard, distance to the water crane, and the propensity of the crew to pass the time of day with other employees while at the water station. An estimate of the time loss per trick for a typical case is shown in the table.

Minutes Lost Per Trick in Switching Service

	Steam	Diesel
Preparatory time	10	5
Move to work	15	5
Replenish water	30	0
Lunch period	20	20*
Return to dispatch point	15	5
Inspection time	10	5
Productive switching time	380	440
Total	480	480

* The Diesel is inspected and serviced during the lunch period.

If cars were switched at the same rate with the two types of motive power, the increased capacity due to time saving alone for this typical example would be 15.75 per cent. However, the Diesel actually switches cars faster than a steam locomotive, as will be vouched for by any operating man who has made the substitution or by any member of a ground crew serving with a Diesel locomotive.

Why Diesel Switches Faster

The reason that a Diesel will switch faster than a corresponding steam locomotive results from its ability to develop high tractive force and horsepower at the drivers during the early stages of an acceleration, and also from the ease of reversing and the automatic delivery of maximum available power. The effect of high tractive force and power may be most easily explained by curves.

Fig. 1 shows the speed-tractive force curve of a typical superheated eight-wheel switcher weighing 214,000 lb. on drivers, having 190 lb. steam pressure, 25-in. by 28-in. cylinders and 51-in. wheels. This is not the indicated curve as usually plotted, since dynamometer tests and service observations show that the service performance is somewhat below such theoretical curves. This curve, however, represents the approximate maximum performance under average conditions and with normal yard handling. Based on this steam locomotive characteristic, the horsepower actually generated at the wheels rises gradually from zero to a peak slightly over 1,500 hp. at 24 m. p. h. Plotted on the same curve is the speed-tractive force characteristic of a 1,000-hp. Diesel locomotive. This is based on ample deduction from the 1,000 hp. (available at the engine) for the operation of all auxiliary equipment on the locomotive and also accounts for the electrical transmission losses. The net horsepower available at the rims of the driving wheels rises gradually from zero to a peak of approximately 760 hp., or about half of the peak horsepower of the steam unit.

Based on a visual inspection of Fig. 1, it appears impossible for the low-powered Diesel to equal the performance of the high-powered steam unit even in switching work. The secret of the Diesel's superiority in yard service, however, lies in the higher available tractive force and the higher horsepower delivered at the wheels up to

4.8 m. p. h. in this case, as shown by the cross-hatched areas, since switching moves are normally confined to a low range of speed.

It may be noted that the Diesel is credited with a starting tractive force of 72,000 lb. while the steam locomotive tractive force is shown at 55,400 lb., corresponding to 30 per cent and 25.9 per cent adhesion respectively. Actually, the 30 per cent adhesive value for the Diesel is more conservative than the 25.9 per cent for the steamer, since the peak adhesion factor during one wheel revolution of the steamer's drivers may be well over 31 per cent (as shown by Fig. 2) and it is this high periodic tractive force which determines the slipping point of the wheels. As a matter of fact, Fig. 2 is drawn on the basis of the customary 85 per cent of boiler pressure, whereas under starting conditions it is possible to get 100 per cent pressure. This would raise the maximum peak to 37 per cent adhesion. On the other hand, the smooth, even torque of electric driving motors permits the utilization of high tractive forces up to the adhesive limits.

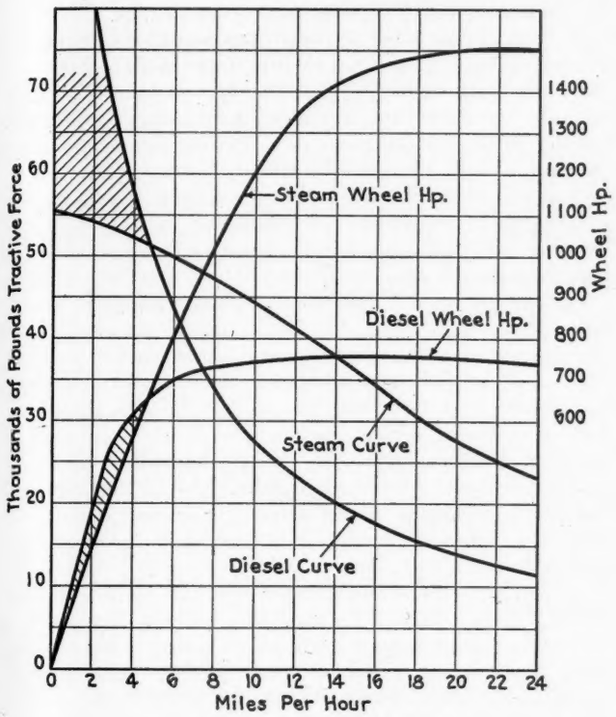


Fig. 1—Characteristic Performance Curves for a Typical Eight-Wheel Steam Switcher and a 1,000-Hp. Diesel-Electric Switcher

Fig. 3 shows the speed-time performance of the steam locomotive and of the Diesel, based on the tractive force characteristics as given by Fig. 1, when moving a 750-ton train. It may be noted that the steam acceleration shows a slight delay at the start which is characteristic of steam power and varies from one to three seconds with different engineers. Since area on this curve represents distance, it may be noted that during the early stages of the acceleration the Diesel covers considerably more distance than the steamer. Above a speed of 11 m. p. h., however, the steam unit begins to cover distance faster than the Diesel to make up for that lost earlier in the acceleration. If both the Diesel and the steam curves are carried on until, when braked to a stop, they have the same area and stop at the same time, the performances of the two types of power are comparable for that particular distance. Above that distance of move the steam will outperform the Diesel, while below that distance the Diesel has a definite advantage. In this particular case, equal performance falls at 800 ft. Since most classification switching moves are far below this distance, the Diesel has a definite time advantage, even though the added weight of the tender permits of a faster braking rate for steam power.

Advantageous for Short Moves

An example of the Diesel advantage for short moves is shown by the dotted braking lines. In this case, it is assumed that cars are being kicked off of the end of the 750-ton cut by accelerating to 8 m. p. h. with either the Diesel or the steam locomotive, which requires a 175-ft. move in either case. Even with the higher steam braking rate, the Diesel is three sec. faster from start to stop.

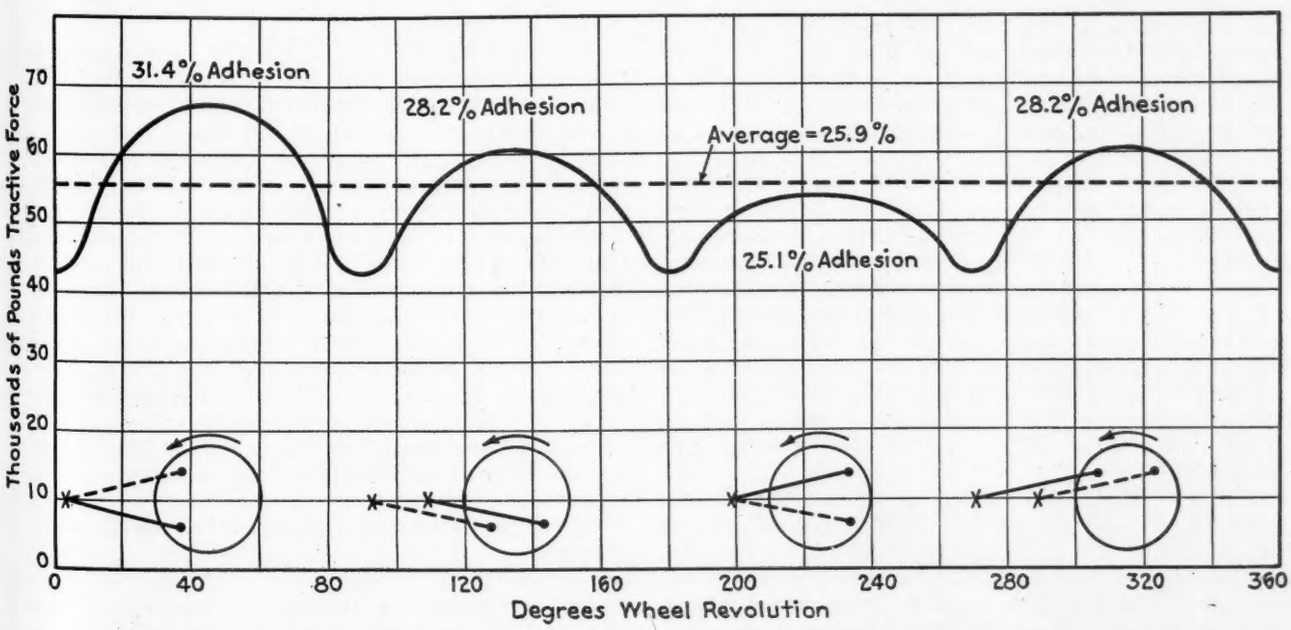


Fig. 2—Approximate Variation in Steam-Locomotive Torque During One Wheel Revolution Under Starting Conditions at 85 Per Cent Boiler Pressure

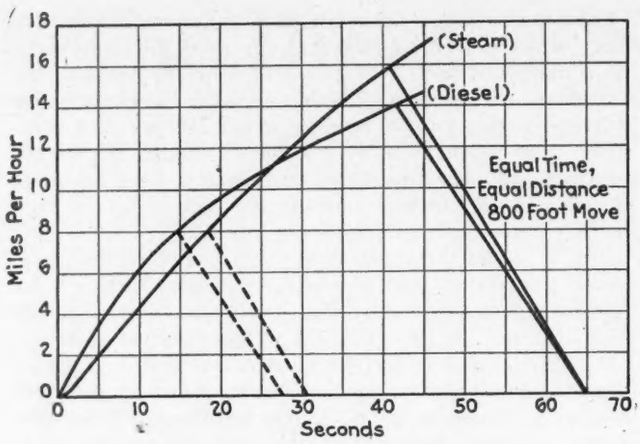


Fig. 3—Speed-Time Comparison (750 Trailing Tons) for a 1,000-Hp. Diesel-Electric Switcher and an Eight-Wheel Steam Switcher

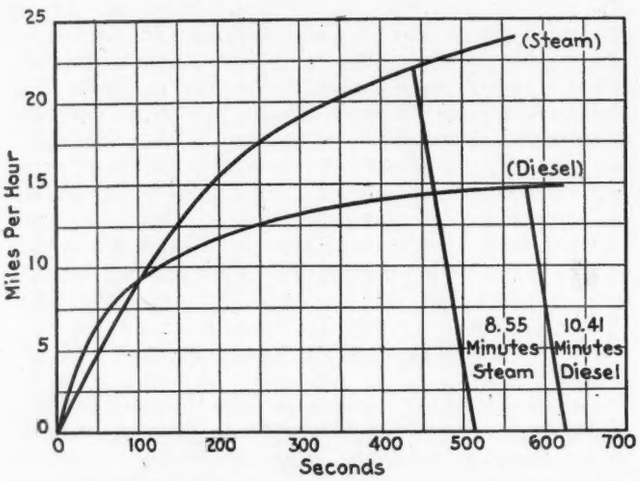


Fig. 4—Relative Performance of an Eight-Wheel Steam Switcher and a 1,000-Hp. Diesel-Electric Switcher with a 3,000-Ton Train on a Two-Mile Haul on Level Tangent Track

Add to this the facts that it takes longer to reverse and that engineers seldom get the peak performance from the steamer (the Diesel automatically gives its full performance without effort by the engineer or fireman) and it is safe to say that the total time saving per move is from six to eight sec., which agrees with observations of service.

Returning to the productive comparison of steam and Diesel power, a steam locomotive should be able to classify 250 to 350 cars in an eight-hr. trick. Taking the average figure of 300 cars and a productive switching time of 380 minutes, this averages 0.79 cars switched per minute or 76 sec. per car. Then taking the low total time saving per move by Diesel power (six sec.), the Diesel should be able to handle a car in 70 seconds. With a productive time of 440 minutes for the Diesel locomotive and at 70 seconds per car, the Diesel will be able to switch 377 cars per shift, or a 25.7 per cent increase in work done.

This analysis has been based on the substitution of a 1,000-hp. Diesel for a fairly representative eight-wheel steam locomotive and will also apply to some of the 2-8-2 type which have been set back to switching duty. When compared to 2-8-0 type, however, the Diesel usually shows much more favorable results. The whole comparison, of course, has been based on fairly conservative hypothetical conditions and a great many switching operations will show considerably more time saving than indicated here. Since there is a wide variation in the switching operations all over the country, each individual locality has to be studied on its own merit in order to determine the number of steam locomotives which may be released by the use of Diesel motive power.

The curves of Fig. 3 have been plotted for the switching range of speeds only. When the classification work involves one or two transfer runs per day, as often encountered, the picture changes very slightly, but where used for a large portion of the time in transfer or road hauls the power deficiency of the Diesel as compared to the steam locomotive is a marked disadvantage. To illustrate this, the relative transfer performance curves are illustrated by Fig. 4 for a two-mile run with a 3,000-ton train. It may be noted that the Diesel requires nearly two minutes more time to make the run than is necessary for the steam locomotive, and of course, for longer runs the time loss is greater. However, if these runs are infrequent, a two-minute time loss is of small consequence as compared to the time saving in the yards.

It has been shown why the Diesel will do more work in a yard than a steam switcher. This usually results in the release of steam locomotives for use elsewhere on the railroad but the number is increased by another Diesel characteristic—that of high utilization factor. Thus, while a 24-hr. job may be served by two steam locomotives plus protection, one Diesel can handle the three-trick assignment with its protection, also. This ratio of steam to Diesels varies, of course, depending upon the number of 24-hr., 16-hr., and 8-hr. jobs in the area, but the high availability of the latter type of unit usually results in a definite reduction of the number of locomotives required.

It has been mentioned that there can be no set rule which will determine the number of Diesel locomotives needed to replace a given number of steam switchers, this being due to variations in yard locations and layouts, density of traffic, locomotive assignments, timed operations, etc. Each application, then, requires an individual study if the best utilization of the Diesel material and investment is to be made. To illustrate how such an investigation may be made, an actual application study is presented here, with the names and locations disguised for obvious reasons.

The switching work of the Central Continental Railroad at Harpersville is somewhat scattered due to the fact that this is the junction point of the main line, passing through town in an east-west direction, with a branch to the southeast and one to the southwest, both joining near the passenger station. Industries are scattered along the main line and also along each of the branches.

The main yard or East Yard is approximately 1.25 miles long and is located along the main line approximately 2.5 miles east of the passenger station, with a secondary yard (the West Yard) adjoining the East Yard toward the city. The freight house, team tracks, and the LCL transfer platforms are located on the southwest branch approximately 1.2 miles from the passenger station. All freight is received and delivered from the East Yard, with one interchange point near the freight house and another about a half mile out the southeastern branch from the passenger station.

The switching service at Harpersville consists of classification in both the East and West Yards, passenger-station switching, freight-house switching, industrial service, and transfers to and from the interchange points. The engine-house is adjacent to the middle of the East Yard and all locomotives are dispatched from this point.

A water crane is located at the enginehouse and another about 400 ft. east of the passenger station. The peak service requires 17 crews—six in the middle of the day, six in the evening, and five at night. This is shown graphically by Fig. 5.

Thirteen steam locomotives of three types are available at Harpersville. Six of these are six-wheel switchers with 145,000 lb. weight on drivers and 32,700 lb. tractive force; five are 2-8-0 type with 189,000 lb. on drivers and 47,000 lb. tractive force; and two are eight-wheel switchers weighing 212,000 lb. and developing 53,000 lb. tractive force. The six-wheel switchers normally handle the industry work, for the rigid wheel bases of the 2-8-0's and the eight-wheel locomotives are long for some of the curves encountered. The 2-8-0 locomotives and eight-wheel switchers handle the yard work and transfers, although the former are rather light for the classification work under peak traffic conditions.

Referring to the assignment chart (Fig. 5), tricks 1 and 2 are handled by one 2-8-0 type, with a gap from 2:30 to 3:00 p. m. to permit hostling. Jobs 3 and 4 are handled by one six-wheel locomotive with some productive time lost for taking water and cleaning the fire. Tricks 5, 6, and 16 are handled by two six-wheel switchers serving alternately for eight hours each. The overlap from 11:00 to 12:00 p. m. is not necessary from a traffic standpoint, so that trick No. 6 may be set forward an hour to make a "round robin" of the three assignments if locomotives are due for heavy repairs they are sent to the main shop of the railroad at Atwell City and replaced by a similar locomotive from there.

In reviewing this work to determine the size and number of Diesel switchers necessary to release steam locomotives for useful purposes elsewhere on the railroad, it was found that 660-hp., 100-ton Diesels will perform all of the services now handled by the six-wheel steamers with considerable margin, and that the 1,000-hp., 120-ton size will outperform both the 2-8-0-'s and the eight-wheel switchers in classification work, will equal the 2-8-0's in the transfer services existing at Harpersville, and will lose slightly in time when compared to the eight-wheel locomotives in transfer operations. However, transfers with the latter locomotives are infrequent.

The present war situation has made it impossible to purchase Diesel locomotives of the 660-hp. size, so that it was necessary to consider the 1,000-hp. size to replace the six-wheel steam locomotives. It was found that the 8-ft. rigid wheelbase of this Diesel would be suitable for all of the short-radius industrial curves and that the weight per axle and its distribution was suitable for all tracks and bridge structures, which then allows the application of this one size of unit to all services.

On the steam assignment chart, Fig. 5, it may be noted that eight assignments (Nos. 1, 2, 7, 8, 9, 12, 13, and 17) confine locomotives to yard work, while two assignments (Nos. 10 and 11) spend additional time in the yard, mak-

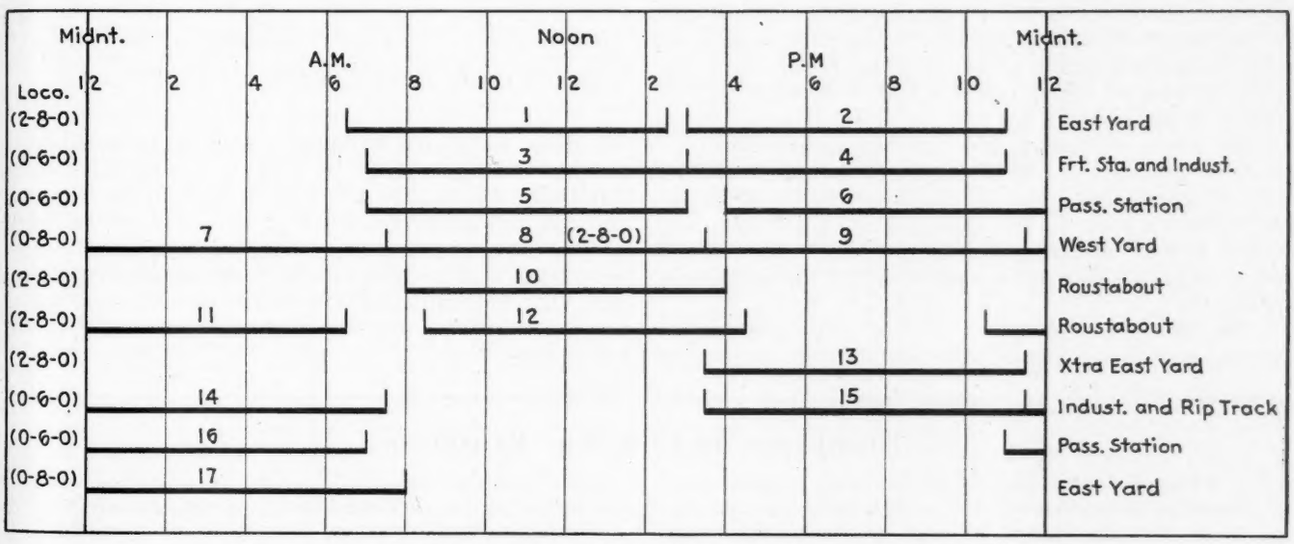


Fig. 5—Steam Switching Locomotive Assignments, Harpersville, August, 1942

desired. Jobs 7, 8, and 9 keep one heavy locomotive in the West Yard continuously. Jobs 10, 11, and 12 require two 2-8-0 units, as these are used for cleaning up the yards and for transfers. Assignment 13 requires a 2-8-0 locomotive, but is put on only during heavy traffic periods. Jobs 14 and 15 (together with a part of Assignment 3 time) handle the industrial switching on the main and branch lines, using six-wheel switchers. These locomotives move industrial loads from the East Yard to a small distributing yard near the passenger station and work out on the main line and branch lines from that point. Trick 17 employs an eight-wheel switcher, as this is a rather heavy job.

These assignments require four 2-8-0 locomotives, five six-wheelers, and two eight-wheel locomotives in active duty, leaving only two 2-8-0 locomotives and one six-wheel switcher for protection, boiler wash, etc. When ing the total yard operating time approximate nine full tricks. Since it may be conservatively estimated that the 1,000-hp. locomotives will switch at least 25 per cent faster than the eight-wheel steamers and about 35 per cent faster than the 2-8-0 locomotives, it was calculated that two assignments (a very safe figure) could be eliminated, which would be Assignments 12 (rouster) and 13 (extra). The character of the industrial, freight-house, and passenger-station work requires a one-for-one substitution of Diesel for steam locomotives. While very little overtime is now worked by steam, the excess capacity of the Diesels will completely eliminate all necessity for it.

The replacement of steam locomotives by Diesels, then, will allow assignments as shown by Fig. 6, readjusting the starting time of some of these, which was found to be entirely feasible. This shows that five active Diesels, if protected by the retention of some of the existing steam

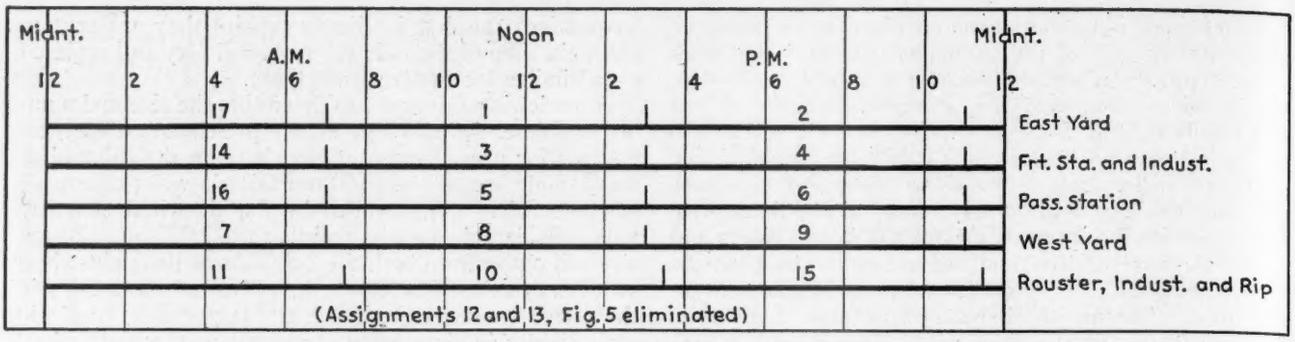


Fig. 6—1,000-Hp. Diesel-Electric Switching Locomotive Assignments, Harpersville, August, 1942

power, will fully handle the service. It was estimated that full protection is afforded by four of the six-wheel switchers, since these may be assigned to industrial duty when a Diesel is shopped for maintenance purposes, thus keeping the Diesels available at all times for the heavy yard and transfer work and also around the passenger station. The net results allow the release of two six-wheel, five 2-8-0, and two eight-wheel steam locomotives (nine in all) by the purchase of but five Diesel locomotives. The term "One-Plus" in this particular case has turned out to be "One Plus Eight Tenths."

The 2-8-0-type locomotives are suitable for road freight hauls and can be utilized as soon as released. The eight-wheel locomotives cannot be used directly for road work, but by moving one of these to Dalesford and the other to Connely, two additional 2-8-0 types may be released and at the same time an improvement in switching capacity is effected at these points. The six-wheelers can always be used, because switching power is badly needed at several points on the railroad.

The study at Harpersville naturally included an economic comparison of the two types of operation. Without going into detail, the approximate results of this are set forth in a table. This represents an annual operating return of approximately 27.7 per cent on the investment, which is far above that necessary to make the investment profitable.

The crying need of today is more economical use of critical materials—steel in particular. In the case of the Harpersville Diesel substitution, an effort was made to compare the steel and copper released for useful work elsewhere on the railroad with that entering into the construction of the Diesels. This was found to be difficult because the details of the designs were not readily available. However, at a conservative estimate, the steel in the steam locomotives employed before the installation of the Diesels amounted to 1,410 tons after the Diesel installation there were 550 tons of steel in the Diesels, and 330 tons in the steam locomotives retained for protection. It is estimated that during steam operation there were seven tons of copper in the steam locomotives used; after Diesel operation there were 18 tons of copper in the Diesel locomotives, and two tons in the protecting steam locomotives.

Case Study of Steam and Diesel Costs in Switching Service

		Annual operating cost		
	Steam	Diesel	Saving	Man hours saved
Crew wages	$236,500	$211,500	$25,000	24,000
Fuel	55,300	13,100	42,200	16,000*
Lubrication	2,000	2,000	0	....
Water	4,300	0	4,300	....
Other supplies	1,500	500	1,000	....
Enginehouse expense	37,000	26,900	10,100	10,000
Repairs	50,500	22,000	28,500	13,500
Total	$387,100	$276,000	$111,100	63,500

* Plus approximately 5,000,000 ton-miles of transportation.

Brookings on Post-War Prospects

What conclusions may be reached with respect to the business outlook during the postwar transition period? First: Will the situation be more, or less, favorable than that of 1919? Second: How will it compare with the situation in the years just preceding this war—before the coming of the great war stimulus?

With respect to the first question, our conclusion is that the situation, on the whole, is somewhat less favorable than that of 1919. While accumulated shortages and deferred demands will assure for numerous lines of industry great activity in the immediate postwar period, other lines are likely to be confronted with serious difficulties—because of reconversion costs, shortages of working capital, and precarious margins of profit. The less hopeful outlook for satisfactory earnings, it must be repeated, is attributable chiefly to the high level of wage and raw material costs resulting from wartime policies.

Our answer to the second question is that the economic situation during the first two years following the war is likely to be distinctly better than that of the late thirties. The combination of large continuing foreign needs and huge domestic replacement demands should, despite the "spotty" situation, result in a volume of production well above that of the years immediately preceding the war.

The unemployment situation in the first two years after this war should be of much less serious proportions than it was in the years just prior to the war. In gauging the employment outlook one must bear in mind:—the prospectively larger production; the relatively slow rate of demobilization (for at least a year some millions would perhaps still be in the armed forces); the withdrawal from the labor market of women and aged workers; the return of youths to schools and colleges; and the reduction of working hours to prewar levels.

It would seem that we might reasonably expect that the number of workers who would not be absorbed in normal productive activities would not exceed 3 to 4 millions, as compared with 8 to 9 millions of unemployed in the late thirties. If it were not for the unfavorable cost-price outlook in manufacturing industry, we would be inclined to place the prospective level of production during the replacement period considerably higher than the foregoing statement would indicate. Correspondingly, we would place the unemployment figure even lower.

—From a Brookings Institution Pamphlet "Collapse or Boom at the End of the War," by Harold G. Moulton and Karl Schlotterbeck

John Marcus Davis, D.L.&W. Chairman, Retires February 1

Released from active duties under the pension regulations, but will continue as a member of board of directors and executive committee

John Marcus Davis

JOHN M. DAVIS, chairman of the board of the Delaware, Lackawanna & Western, on January 28 asked to be relieved of his duties, effective January 31. He has thus retired from active service under the pension regulations of the company but, at the request of the board of managers, will continue as a member of the board and its executive committee. Mr. Davis came to the Lackawanna as president in July, 1925, and served in that position until December, 1940, when he retired and was elected chairman of the board, a position which had been vacant since 1931.

Born in Anderson county, Texas, on November 5, 1871, Mr. Davis entered railroad service in 1889 in the transportation department of the San Antonio & Arkansas Pass. Two years later he became stenographer, clerk and car distributor of the Atchison, Topeka & Santa Fe at Temple, Tex. In 1894 he was employed as secretary to the superintendent of the Mexican Central at Tampico, Mex. He entered the service of the Great Northern as clerk in 1895, later being advanced to chief clerk to the general manager.

Mr. Davis interrupted his railroad service for a short period at this time to go with the Northern Steamship Company at Duluth, Minn., and Buffalo, N. Y., later returning to the Great Northern as chief clerk to the assistant general superintendent at St. Paul, Minn. He next served as assistant superintendent at Melrose, Minn., and as superintendent at Breckenridge, Minn., and Havre, Mont.

In 1900 Mr. Davis was appointed superintendent of the Erie at Dunmore, Pa., later being transferred to Hornell, N. Y. He returned to the Great Northern in 1903, serving successively as superintendent at Superior, Wis., and Minot, N. D. He was later promoted to assistant general superintendent of the Central district of that road.

In 1906 he was appointed general superintendent of the Harriman Lines at Salt Lake City, Utah. Four years later he went to San Francisco, Cal., as general superintendent of the Southern Pacific.

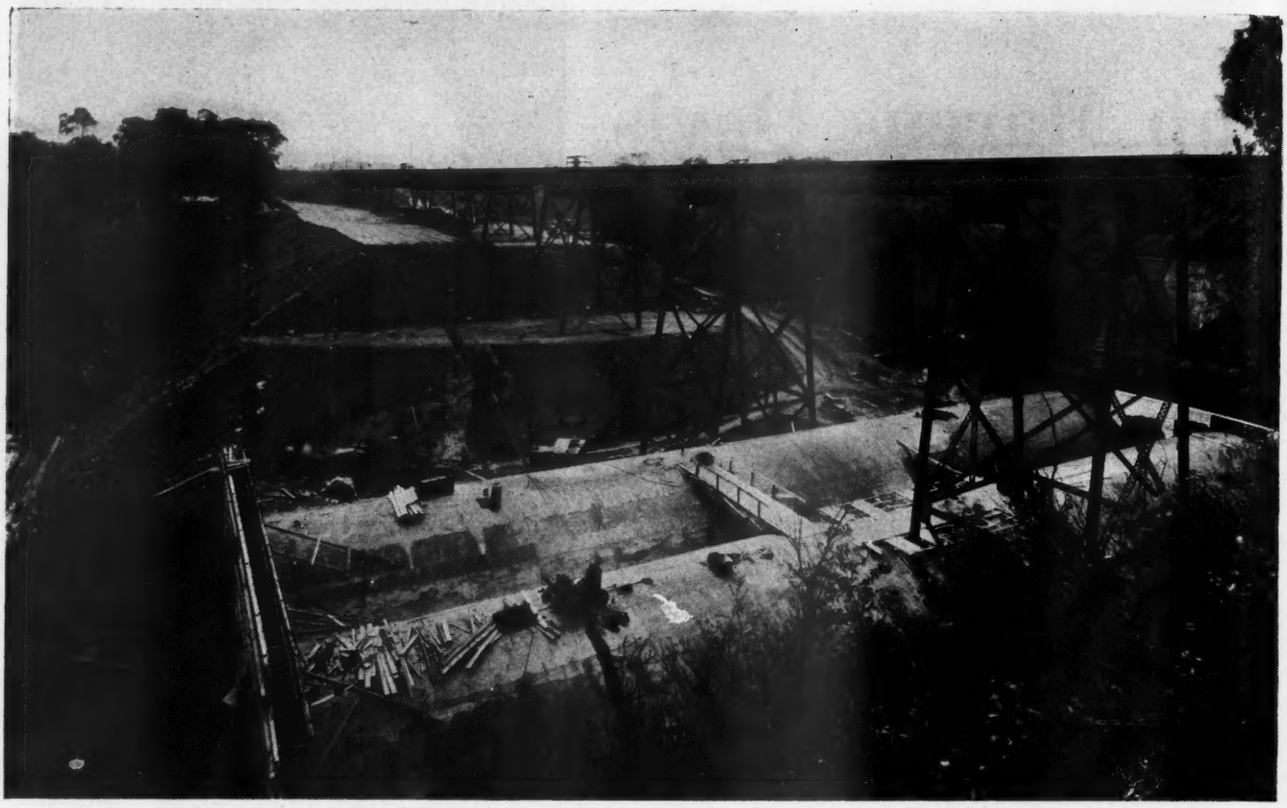
Mr. Davis became general manager of the Baltimore & Ohio Southwestern and the Cincinnati, Hamilton & Dayton at Cincinnati, Ohio, in 1914 and two years later, in 1916, he was appointed vice-president in charge of maintenance and operation, of the Baltimore & Ohio at Baltimore, Md. During federal control of the railroads in 1918, he was a member of the general managers' committee and manager of the B. & O.'s New York terminals.

During 1919 and 1920 he was engaged in studying and reporting on various properties and in 1920 was elected president of Manning, Maxwell & Moore, Inc., machinery manufacturers in New York. Five years later, in 1925, he became president of the Delaware, Lackawanna & Western. He resigned as president of the road in 1940 and was appointed chairman of the board.

Mr. Davis served as chairman of the Railroads' World's Fair Committee during the New York World's Fair and was in charge of all railroad participation. He is also a director of the Lehigh & Hudson River, the Green Bay & Western, and the Western Electric Company, and is a member of the Railroad Machinery Club of New York.

Mr. Davis in his period of association with the Lackawanna saw the property through its most difficult years, and back on the way—permanently be it hoped—to better days again. Operating revenues, which dropped from $81,743,000 in 1929 to a low of $43,339,000 in 1933, climbed back to $50,454,000 in 1939. In 1940 they were $51,892,000; in 1941, $61,111,461; and in 1942 mounted to a total of $72,544,985. In 1929 the Lackawanna earned net railway operating income of $17,509,000. In 1933 and 1938 the operating net fell off to $3,480,000 and $2,510,000 respectively. But, in 1940, this total rose to $6,346,000. In 1941 it was $10,126,000 and, in 1942, $11,649,000.

Not only extreme vicissitudes of earnings marked the eventful years of Mr. Davis' active association with the Lackawanna, but also the culmination of the system's protracted program of improvements, which were brought to completion in 1931 by the electrification of its North Jersey suburban service.



The Embankment Was Built Out From the South End of the Bridge While the Double Arch Was Under Construction

Retirement of Old Viaduct Speeds Traffic on Two Railroads

Forty-year-old bridge carrying tracks of the Nickel Plate and the Pennsylvania gives way to an embankment over a double concrete arch

A BOTTLENECK in the movement of wartime traffic by two railroads, in the form of a double-track 40-year old steel viaduct over which traffic could proceed only at restricted speeds, has been removed through the replacement of the structure with an earth embankment supported by a double reinforced concrete arch culvert. Incidentally, this project constituted a contribution to the war effort in still another respect. Although the quantity of reinforcing steel needed for the arch structure came to 275 tons, the amount of steel scrap removed from the old bridge was such as to make a net contribution of 242 tons to the national scrap pile. Beyond these considerations, the project is of interest for other reasons, including the manner in which a number of tower columns and braces projecting through the concrete arch were cut off after the fill had been placed.

The viaduct that was replaced in this project extended across 18-Mile Creek near Lakeview, N. Y., about 15 miles west of Buffalo. A double-track structure, the viaduct, owned and maintained jointly by the New York, Chicago & St. Louis and the Pennsylvania, carried double-track joint operation of both railroads. The track of the Nickel Plate at this location is the main line of that company between Buffalo and Cleveland, while that of the Pennsylvania is one of its lines between Buffalo and Pittsburgh.

Old Structure Was Too Light

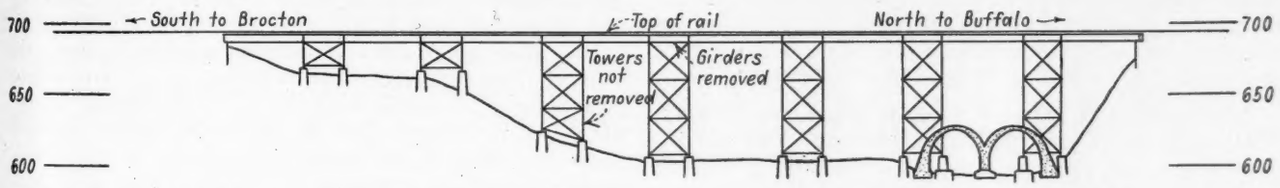
Built in 1902, the viaduct was 675 ft. long and consisted of deck plate girder spans carried on structural steel towers, the tower spans being 30 ft. long and the main spans between towers ranging from 50 ft. to 65 ft. in length. The height of the bridge above the water level was about 100 ft. Because of increases in the weights of locomotives since the viaduct was built, it had not only become necessary in recent years to impose stringent speed restrictions on all movements over the bridge, but to prohibit altogether the operation over it of the heaviest units of motive power. Furthermore, there was always

present the possibility that further restrictions in speed and in the class of power operating over the structure would become necessary. Constant repairs were needed to keep the bridge in service.

With the outbreak of the war, the two lines over the bridge assumed a new importance owing to their strategic locations, and the presence of the viaduct became a constant threat to the efficient and uninterrupted operation of trains over them. Consideration was given, therefore, to the problem of removing the bottleneck that it presented and, considering all factors, it was decided that this could be done most economically and with the least consumption of critical materials by constructing an embankment across the ravine and installing a waterway opening consisting of a double concrete arch culvert. The old structure could have been continued in service by strengthening and reinforcing it, but this solution had certain disadvantages, including the fact that it would have required the use of 1,128 tons of structural steel and 130 tons of reinforcing steel, whereas the expedient chosen actually promised the release of a considerable tonnage of this critical metal. Specifically, the plan that was adopted for carrying out the project contemplated the salvaging of the main girders and the lateral bracing, totaling 517 tons of metal, which was, as already noted, about 242 tons in excess of the amount of reinforcing steel required for the concrete construction.

In the double-arch culvert that was designed for this location, each barrel has a width of 39 ft. 6 in. at the springing line and a height, from the top of the footing to the intrados at the crown, of 31 ft. Located on a slight skew, the barrels have a length of 248 ft. 9 in. measured along their center lines, and of 248 ft. measured at right angles to the track. Such is the topography at this location that the stream lies close to the northerly side of the ravine and, in adapting the arch to the layout, it was necessary to place it in such a manner that it lies between, and encroaches partly on, the locations of the first and second viaduct towers from the northerly end of the bridge. More specifically, one of the bents in each of these towers infringed on the location of the double arch, and, as described at another point in this article, special

The Embankment Was Placed and Compacted in Accordance with the Latest Grading Methods



This Longitudinal Section at the Bridge Site Shows the Location of the Double Arch Relative to the Old Viaduct

Construction View of the Double Arch. Those Members of the Two Towers that Fall Inside the Arch Barrels Were Removed After the Structure Had Been Completed and the Embankment Placed

provision had to be made for removing the lower ends of the posts in these bents and certain of the bracing, following the completion of the arches and the placing of the embankment.

Grading Methods

In carrying out this project, the work of placing the embankment was started on the low level south of the arches and continued until the level of the tops of the arches was reached, and was so scheduled that, as soon as the arch construction permitted, the embankment throughout was at the same level and its completion was made in horizontal layers throughout. Since the double arch is located near the northerly side of the ravine, it was possible to conduct the grading and the concreting work simultaneously, the latter operation having been completed by the time the grading work had reached the site of the bridge structure. Approximately 254,000 cu. yds. of embankment were required in the fill, which was built with a crown 39 ft. wide and with side slopes of 1⅝ to 1. In line with modern practice, the embankment was placed in layers one foot thick, each layer being thoroughly compacted before placing the next layer. The

material was obtained from borrow pits, hauled to the site in dump trucks, and spread with bulldozers followed by a 12-ft. blade grader. The material was compacted by rolling with a 10,000-lb. sheepsfoot roller followed by a scarifier and self-propelled road roller with a combined weight of 12 tons.

Selected material was used for filling around the structural members in the towers and was placed and compacted with pneumatic tampers in such a manner as to obtain the maximum practicable degree of stability. As the placing of the embankment progressed, it frequently happened that the presence of the bracing in the towers interfered with the movements of the grading equipment within and around them. When this happened, it was the practice to remove or relocate as much of the bracing as safety permitted, so as to give the equipment the desired freedom of action. In doing this, care was taken to avoid weakening the towers. When horizontal tower bracing struts were in the way they were removed after similar struts had been placed at a level sufficiently higher to permit the equipment to pass under them. Diagonal tower bracing was handled in a somewhat similar manner. All transverse bracing was left

(*Continued on page 322*)

Resources Board Defends Its Plan

Director of transport study, advocate of socialization of carriers' roadway so federal "public works" money can be expended on it, objects to our criticism—We answer him

[*The transportation report of the National Resources Planning Board has been discussed editorially by this paper on several occasions—in particular in the issues of November 14, page 767, and December 5, page 907. The Board's director in charge of its transportation study has taken exception to our comment thereon, and we are glad to accord him the opportunity herewith to make known his objections. Immediately following his letter will be found our answer to it.*—EDITOR.]

EXECUTIVE OFFICE OF THE PRESIDENT
National Resources Planning Board
Washington, D. C.

January 25, 1943.

TO THE EDITOR:

In the editorial in your issue of December 5, 1942, you accuse this Board and those concerned with our recent report on *Transportation and National Policy* of issuing "cunningly devised and camouflaged propaganda," of undertaking a "campaign for replacing free enterprise with Nazi-Fascist-Communist totalitarian government enterprise," of "sophistry and maneuvering," of being "cunning, persevering and persuasive plotters," and finally of knavery.

In view of my responsibility as director of the Board's Transportation Study, I should like to suggest that we have a look at the record of what we actually said in this report on the issues you discuss, in contrast to the charges in your editorials.

Uniform Plan for All Transport

1. Pointing out that the federal government spends a billion dollars a year in the provision of transportation facilities (more than matched by state and local expenditures), we urged that a national transportation agency should be established by the Congress for the purpose of co-ordinating federal planning and development activities in the field of transportation in lieu of promotion by separate and independent agencies acting as special advocates of one medium or another. That recommendation would seem to me to be quite in line with sound American business practice, whether in the railroad industry, in the steel industry, or any other large industry.

2. We recommended that the planning and reconstruction of modern unified terminal facilities be recognized as a public responsibility. It is no news to you that airline and ocean terminals have always been provided largely by governmental bodies, and I have never heard of any one engaged in the air transportation business or the ocean shipping business complain that such public provision of terminal facilities constituted any attack on or restraint of free enterprise in those fields.

In any large metropolitan center, railroad terminals are essentially public facilities, although the historical development of railroading in this country has placed the full burden of such facilities on the carriers. I do not believe that this practice is soundly based in equity, and I doubt if we can secure an intelligent co-ordination and rebuilding of terminals if that practice continues. Moreover, I do not believe that the replanning of our cities to meet the needs of the future can be done without reference to the replanning and co-ordination of transportation terminal facilities, railroad, truck, bus, and air.

Probably somewhere between one-third and one-half of the railroads' investment is represented by terminal facilities of one sort or another, and it is clear to laymen as well as to railroad men that many of these facilities are antiquated. And I do not believe that this vast investment yields anything like a commensurate return to the carriers, in view of the essentially public functions which they must perform and in view of competitive restrictions and roundaboutness which separate railroad ownership now imposes. Do you believe that public ownership of such terminal facilities, open on equal terms to all carriers on the basis of a user charge variable with the volume of use, would constitute an attack on or restraint of free enterprise? And do you believe that such a recommendation could be construed as unfriendly to the railroad industry?

Post-War Demand For More Transportation

3. Noting the development of five strong forms of transportation and the keen competition among these forms, we pointed out the elementary fact that the basic facilities for highway, waterway, and airway transport are almost entirely publicly provided. We noted the great development of these facilities, supported by a strong, insistent, and pervasive public demand. We ex-

pressed the firm belief that with the return of peace we would see vastly greater developments in these fields that would overshadow all the progress of the past. In sharp contrast we noted that the railroads are dependent for modernization and improvement on access to private investment markets, thus placing them in an unequal competitive position with respect to both the physical possibilities of development and the relative burden of fixed charges. We pointed out that the net result has been increasingly to put railroad securities in the speculative classification and that in consequence there is little assurance that capital funds will be forthcoming in amounts adequate to the task.

It was our recommendation that by appropriate fiscal devices and under appropriate safeguards the credit of the federal government should be made available in order that the formidable tasks of railroad modernization and improvement may be accomplished in the post-war years. We refrained from any specific recommendation, noting that the proposed national transportation agency must devise suitable means.

In the discussion in the summary we called attention to some possible methods, including the formation of mixed public-private investment corporations, public leasing of the railway fixed plant of ways and structures, or public ownership of that fixed plant. We did not recommend any one of these methods and noted specifically that perhaps other methods could be developed. I realize full well that this field is highly controversial, and I do not believe that any man is in position to take a dogmatic stand concerning these or other methods of accomplishing the task of modernizing and rehabilitating our railway plant in order that it may be in position to meet the competition of its vigorous rivals on a fair basis. But I think we can agree that progressive development of the railway plant is the all-important consideration.

Desires to Avoid Railroad Retrogression

I am convinced that for the foreseeable future the railroads of the country will continue to constitute the backbone of transportation and that for the movement of heavy freight in particular they will have no peer. It would be painful to contemplate another decade of retrogression in the railroad industry, and it would be painful to contemplate a resumption in the post-war years of that erosion of traffic which by any reasonable standard is properly railroad traffic. Surely, all friends of the railroad industry and all believers in the possibilities of great progress in railroad transportation must recognize the imperative importance of vast rehabilitation and modernization programs in that industry; and surely, the challenge is so great that no one of us can afford the luxury of dogmatic views.

4. You and others have charged this Board with desiring to bring about government ownership and operation of all forms of transportation. Anyone who takes the trouble to read the letters of transmittal and the summary of findings and recommendations will see at once that such a charge rests on a distorted caricature of what is actually said. For example, contrast this charge with the strong suggestion, contained in the discussion of the regulatory problem, that perhaps relaxation of the more recent regulatory measures may be in order to the end that greater reliance may be placed on competitive forces. Note also the strong emphasis on a continuance of competition among vigorous and rival forms of transportation. Are these suggestions and discussions consistent with a desire to bring about government ownership and operation of all forms of transportation?

Is Government Ownership Inevitable?

5. You make much of the contributed section, among 17 agency and individual contributions, in which the author sought to weigh objectively both the pros and cons of government ownership of the railroads. The author of that contribution did make clear in his conclusions that he leans to the view that ultimately government ownership of railroads is inevitable, and it must be no secret to you that a good many people, including some in very conservative circles, share that view. We made no effort to suppress that contributor's views just as we made no effort to suppress the contrary views expressed by the contributor of the section entitled "Railway Transport." To have ignored this problem and to have included no discussion of the issue would have been a conspicuous omission. After all, a major report on transport development must seek to stand the test of time and reflect not merely the views of the moment.

6. Although it is not my responsibility to answer the questions in your editorial which you put to "the New Dealers," I should like to call to your attention a few omissions in your statements. In your discussion of governmental expenditures and the national income over the period 1919 to 1929, you overlooked the major depression, drastic deflation, and low levels of economic activity which spanned a considerable part of the period 1920-1922, which represented, I believe, one of the deepest depressions recorded up to that time. You overlooked also the serious, though fortunately short-lived, recessions of 1924 and 1927. And you overlooked the devastating and unprecedented depression which set in during the fall of 1929 and which was not reversed in direction until 1933. I take your editorial to represent a plea for a return to the policies of that period, and it is for this reason that I call to your attention these conspicuous omissions. To return to that policy would, it seems to me, mean that we had forgotten much and had learned little.

In contrast to your plea, I should like to call to your attention and to the attention of the railroad and railroad equipment industries some of the recent columns by Mr. Walter Lippman, whom you would certainly not accuse of being a "New Dealer." He has clearly stated the growing conviction among men everywhere that governmental policies must be directed toward the maintenance of full employment; that people who have seen the high levels of productivity of which our economy is capable under war conditions, will demand that these productive powers be utilized for the purpose of peace as well. Mr. Lippman notes that "nothing will ever persuade the American people after this war that unemployment is an act of God about which men can do nothing." And he adds very properly that the job is immense, and that we ought to be mature enough to think objectively of the job which has to be done. It was in that spirit that we sought in the transportation report to call attention to the vast possibilities which lie ahead in the field of transportation.

Vigorous Railroad Industry Needed

I do not believe for a minute that we can achieve and maintain in this country anything like full employment without these great developments in transportation, and in particular I do not believe that full employment can be achieved without a vigorous railroad industry and

without a vigorous and active railroad equipment industry. In other words, the railroad industry and the railroad equipment industry share jointly with other American industries and with the American people generally through the agencies of local, state, and federal government the heavy and serious responsibility of planning and programming to the end that full utilization of our economy may be achieved, that our people may not again be let down by the catastrophes of depression and unemployment. Regardless of the swings of political fortune about which you speak, I do not believe that we can look forward to a return to any "good old days" or a return to a passive and neutral concept of government. The world does not move that way.

RALPH J. WATKINS
Assistant Director.

To the Foregoing Railway Age Replies:

In Dr. Watkins' letter, under his heading No. 6, he says that in our discussion we have overlooked the depressions and recessions following the last war, especially that beginning in 1930, and adds: "I take your editorial to represent a plea for a return to the policies of that period, and it is for that reason that I call your attention to these conspicuous omissions."

Our Views of "Old Deal" Business Policies

Readers of *Railway Age* will realize how far from accurate that imputation is. Our differences with the policies of business and government which the term "Old Deal" sufficiently describes have been as sharp, and as explicitly expressed, as with those of the New Deal. In an address to the Western Conference of Railway Counsel, and published in our issue of October 6, 1942, the editor of this paper said:

"We have many leaders and spokesmen of private business who evidently believe, even if they don't say it, that the entire economy—excepting transportation agencies and public utilities now subject to regulation—should not only be run by private enterprise, but by a private enterprise that should be allowed to employ virtually any and all monopoly practices that it may consider to its interest. . . .

"In my opinion business in this country after the war—if it has any choice in the matter—will have to choose between a virtually government-managed economy and a private enterprise economy in which competition within naturally competitive industries will be enforced by government as it has not been for years. And, frankly, I hope this will be the case. . . .

"Much business still shows, as it has for years, that it wants to eat its cake and keep it—to practice monopoly when it believes it will gain thereby, but also to keep private enterprise, the essence and essential driving force of which is competition within naturally competitive industries. . . .

"When the Great Depression struck, the leadership of private enterprise had no program or policies to offer excepting such as would deepen and protract it. I have been credibly informed repeatedly that the original plan of N. R. A. was taken to the White House by the then president of the United States Chamber of Commerce. Being a program for cartelizing industry, advancing wages and reducing working hours, N. R. A. was perfectly adapted to protracting the depression—which it did; and yet at first it was widely supported by business leaders who later as widely condemned it."

Old Mistakes Don't Justify New Ones

We could cite scores of statements of similar purport from the editorial pages of this paper during the last decade, as our regular readers are well aware—overwhelming evidence that, whatever our criticism of the New Deal and its socialistic "planners" may be, we certainly have given no one the remotest occasion to suspect us of believing that the correction of the errors of the present regime will be found in reinstating the errors of the regime which it replaced. To bring Dr. Watkins up-to-date on our views on this question we have sent him a copy of an address made by the editor of this paper to the Cleveland Chamber of Commerce on January 12, and of an editorial from the February issue of "American Builder" (which is published by the corporation of which the editor of this paper is chairman)—which expressions follow the principles, equally critical of the economic heterodoxy of both Old and New Deals, with which *Railway Age* readers are fully familiar.

There is nothing abstruse about our position. It is, simply, that *economic* goods and services should be provided by competitive private enterprise (or government-regulated monopoly where monopoly is "natural," as in the case of public utilities). The "Old Deal" position was—and, we fear, is—that the government should permit naturally-competitive enterprise to practice monopoly, and also to benefit from protective tariffs and subsidies to its transportation by water, by highway, and by air. The New Deal view, as exemplified by Dr. Watkins, is that subsides now enter into such a large part of transportation that no agency not subsidized can hold its own—hence we must subsidize (and, incidentally, bureaucratically control) them all. But what is wrong with the much simpler alternative of subsidizing none?

What About the 1937 "Recession"?

Since Dr. Watkins has mentioned our sins of omission in disregarding some "recessions," we venture to call attention to the fact that he fails to mention one. This was the one which began in 1937, under the New Deal, and which, according to the Department of Commerce, reduced national income produced in 1938 to $7 billion $400 million less than in 1937 in "current dollars" and to $5 billion less in "1935-1939 dollars." It occurred in spite of the fact that total government expenditures (federal, state and local) in 1936, 1937 and 1938 averaged over $16 billion a year, or twice as much as in 1922, 1923 and 1924 when business was rapidly recovering from the slump in 1921.

Dr. Watkins says, also, that we overlooked the fact that the "devastating and unprecedented depression which set in during the fall of 1929 . . . was not reversed in direction until 1933." We have not "overlooked" it in other discussions and editorials, as readers of this paper know and as the material we have sent Dr. Watkins will show him. And it is not a fact that the depression "was not reversed until 1933." Recovery began in the last third of 1932.

This statement was first made in an editorial in *Railway Age* of September 17, 1932, and was repeatedly made in subsequent issues. It was based upon a plain change in the trend of freight carloadings, which were then the best available measure of total national production. Carloadings in August, 1932, were only 48 per cent of the 1925-1929 average. In September they were 51.6 per cent of that average; in October, 54.8 per cent; in November, 54.2 per cent; in December, 56.8 per cent.

They were set back by the banking crisis in the first quarter of 1933, but even during that period never became relatively as small as in the late summer of 1932; and they began recovering again as soon as the banks were reopened. In May they were 8 per cent larger than in 1932; in June, 20 per cent larger; in July, 29 per cent larger, and 62 per cent of the 1925-1929 average.

Continuing to allow for seasonal variations, they began declining in August, 1933, and never in any month thereafter, until February, 1935, were relatively as large as in July, 1933. In July, 1933, they averaged 625,000 a week; two years later, in July, 1935 only 556,000 a week. And their increase in the entire year 1935 over the entire year 1933 was less than 9 per cent.

We have presented these figures many times in refutation of the claim that recovery was started by New Deal policies adopted in the famous "one hundred days." Actually, these policies arrested for two years recovery that had already begun and got well under way. And they did not prevent the unusually violent recession which began in 1937.

The real issue between Dr. Watkins and us apparently is whether more employment and production can be provided (1) by free enterprise plus government expenditures on semi-economic or non-economic public works not inviting to private enterprise, or (2) by a private enterprise subjected to government regimentation, heavy taxation, and government competition due to huge government spending not confined to true "public works." We are as much opposed to monopoly and monopolistic practices in naturally competitive industries as anybody, as many public utterances of ours show.

Investors Own Their Investment

When Dr. Watkins proposed in his report that the railroads should be included in public works for the purpose of enabling large government expenditures to be made upon them he, in effect, advocated government ownership of railways. For whatever investment government might make in the railways would be owned by the government. And it is a practical certainty that partial government ownership would prove but a step toward complete government ownership and management. We base this statement on world-wide railroad history, with which we are quite as familiar as anybody who contributed to the National Resources Board's report.

Like Dr. Watkins, we do not believe that "full employment can be achieved without a vigorous railroad industry and without a vigorous and active railroad equipment industry." But we do not agree that private enterprise in these industries cannot or will not contribute its share in providing employment if government affords it the opportunity. It has done so in the past when afforded opportunity; and the opportunity can be afforded in future by government regulating all carriers alike and subsidizing none of them.

Dr. Watkins remarks in his letter that he has never heard of other carriers objecting to the government providing them with terminal facilities. Neither have we; they have sought and welcomed the subsidies thereby given them. But what his report proposes is that the government shall acquire terminals and other structures already built and owned by the railways, and integral parts of their properties, in order to spend the taxpayers' money on them. If the government similarly proposed acquiring property owned by other carriers in order to spend money on it, other carriers would soon be heard complaining and objecting loudly enough about it.

Dr. Watkins asks: "Do you believe that public ownership of such (railway) terminal facilities, open on equal terms to all carriers on the basis of a user charge variable with the volume of use, would constitute an attack on or restraint of free enterprise? And do you believe that such a recommendation could be construed as unfriendly to the railroad industry? The answer to both questions is "Yes."

Railroads Best Prepared for War of Any Industry

We can see no more reason for the substitution of government ownership for private ownership of railway terminals than for complete government ownership of railways and numerous other industries. In many instances railway terminals already are used jointly, with payment on a user basis. The vast increase in traffic that the railways recently have handled, individually and in co-operation, is sufficient evidence of what they can be relied on to accomplish voluntarily in future under complete private ownership, if afforded opportunity to make sufficient earnings and thereby to make sufficient investment. We heard Gen. Charles P. Gross, chief of transportation of the army, make the statement last week that the railways had proven better prepared for war than any other American industry. Why assume that they cannot, under continued complete private ownership and management, prepare equally well for peace? Any such assumption can more justifiably be made regarding any other industry; because the record proves that, without government aid, the railways during this war have done a better job than any other industry.

The fact seems almost universally disregarded that legally a railroad corporation consists solely of its stockholders. They are the *owners* of the industry; and, therefore, whether any recommendation or proposal is "an attack on free enterprise" or is "unfriendly to the industry" depends upon the probable effect on the stockholders. A recommendation for government acquisition of railway property is a recommendation that it be taken from the stockholders; and whether it is "unfriendly to the industry" or not depends on how much would be paid the stockholders for the property taken and on how much income the stockholders would be allowed to derive from the property they were allowed to retain.

In the twelve years ending 1930 average net income per share on railway stock was $7; and investment in railway properties increased $7,000 million. In the twelve years ending with 1942 average net income per share was $1.90; and there was virtually no increase in total investment. Traffic has been handled during the present war period almost entirely with facilities provided by investment made during the pre-depression period. This experience during the pre-depression period, the depression period and the present war period sufficiently demonstrates that what is necessary, and all that is necessary, to assure that, under complete private ownership, the railways will provide good and adequate service is for government to refrain from policies preventing them from making adequate net income and thereby preventing adequate private investment from being made in them.

Government Determined to Prevent Profits?

It follows necessarily that the conclusion that private enterprise cannot be depended upon in future to perform its normal function in the railroad industry is based on the premise that government won't give it a chance. That, however, is the premise of those who prepared

the National Resources Board's report, not ours. We refuse to accept it, as regards the railroad or any other industry. In the long run, important national policies are not determined by those more or less temporarily located in Washington, but by the American people. And we have too much confidence in the intelligence and good sense of the American people to believe that they are ready to abandon, in the railroad or any other industry, a political and economic system under which they have enjoyed the most freedom, the largest incomes and the highest standards of living that ever prevailed anywhere.

Honest Liberalism Is the Only Solution

Dr. Watkins concludes by saying, "The world does not move that way." We are aware that the world, including our own nation, has been moving toward political and economic totalitarianism, with its inevitable concomitants of economic retrogression and tyranny, and that anybody who openly and energetically resists this trend is branded by those selfishly or ignorantly promoting it as a "reactionary." This does not concern or alarm us. The editor of this paper is old enough, and has read enough political and economic literature, to know, first, that the word "liberal" was invented to describe those who opposed such policies as Dr. Watkins advocates and who *favored* such policies as this paper advocates, and, second, that all the economic progress of the world has been made under *true* liberal policies minimizing government intervention in economic affairs and encouraging free private enterprise.

Because of that indisputable record of long and world-wide experience, we consider it the duty of every intelligent American citizen to resist every effort to promote totalitarianism in this country, even though as sugar-coated and camouflaged as it is in the National Resources Board's report on transportation.

Retirement of Old Viaduct Speeds Traffic on Two Lines

(*Continued from page 318*)

in place except in the two towers at the arches, where certain changes were made to avoid interference with the concrete construction.

Five Steps

The work involved in carrying out the project was characterized by five distinct steps or stages. The first of these consisted of the construction of the double arch and the placing of the embankment to a level about 10 ft. below the bottom flanges of the girders. During this step, crossovers were installed at a minimum distance of 500 ft. from each end of the bridge to permit the routing of traffic to be changed as required during later stages. In the second step, single-track operation over the bridge was instituted for 12 days, the abandoned track and its supporting girders were removed, after which the embankment for this track was completed to subgrade and one permanent track laid at an elevation one foot below the final grade. In the third step, single-track operation over this permanent track was instituted for 21 days while the other track and its supporting girders were removed, the embankment completed to its full width, and the second permanent track laid to its final grade. Next, as step No. 4, double-track operation was resumed and both tracks brought to final line and surface. As the fifth and final step, the temporary crossovers were removed. The total time of single-track operation was 33 days.

Removal of Tower Columns at Arch

As noted previously, two of the tower bents of the viaduct were located within the confines of the double arch, one in each barrel, and these were allowed to remain substantially intact until after the new structure had been built and the embankment had been placed. The only change that was made in these bents preparatory to the construction of the double arch was the removal of the transverse diagonal bracing from the lower panels and its replacement in each bent with a horizontal strut placed slightly below the level of the intrados of the arch.

In placing the concrete in the arch barrels, provision was made to simplify the problem of later removing the lower ends of the four columns in the two bents and that part of the longitudinal bracing that projected into the struture. The measures that were taken toward this end included the provision of a temporary opening in the arch barrel at each of the columns by installing a wood box in the concrete form around the column. Also, after the concrete had beeen placed, a small timber enclosure was built around each column at the point where it emerged from the extrados of the arch barrel. By thus closing the openings around the tower columns, it was made possible to proceed with the placing of the embankment.

When the grading had been completed and the tracks placed in service on the embankment, the lower end of each post was removed by cutting it off with an oxy-acetylene torch at a point in the enclosure above the extrados. It was with this in view that the openings around the columns had been made of sufficient size to permit a workman to reach into the enclosures above them to do the cutting. When the columns had been removed, each of the holes in the arch barrels was provided at the extrados with a timber cover, and by means of holes in these covers the enclosures above the barrels were blown full of crushed slag. As the final operation, the openings in the barrels of the arches were filled with concrete.

The same procedure was employed in removing the longitudinal bracing in the two towers that extended through the arch barrels. The work also included the removal of the pedestals of the tower columns from their locations inside the arches.

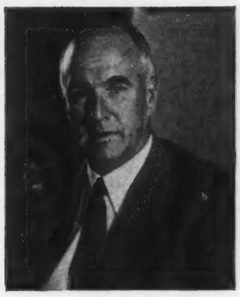
The general plans and specifications for this project were developed jointly by conference between the two railroad companies, after which, by agreement, the Pennsylvania developed the details, contracted for the work, and supervised its execution. The general contractor was the Howes & Farrell Co., Inc., of Oneida, N. Y., who sublet the grading contract to Davis & Stearns, Inc., Whitesboro, N. Y.

"It were good therefore that men in their innovations would follow the example of time itself; which indeed innovateth greatly, but quietly, and by degrees, scarce to be perceived."—BACON.

"The first duty of the sovereign—that of defending the society from the violence and injustice of other independent societies—grows gradually more and more expensive as the society advances in civilization."—ADAM SMITH.

A. C. Mann

A. N. Crenshaw



D. C. Curtis

E. A. Clifford

Western Railroads Need Materials

Supply officers see tough going in review of problems before Western Railway Club—Warn that railroads must be maintained to win

THE railroad plant, including roadway, rolling stock and locomotives, will require greater maintenance and renewals in 1943 than ever before and a larger quota of materials and equipment, A. C. Mann, vice president of the Illinois Central, in charge of purchases and stores, told the Western Railway Club on February 1. This war, the past chairman of the Purchases and Stores division, A. A. R., added, speaking to 800 railroad and railway supply men who attended the Club's Purchases and Stores night, must be won not only on the fighting front but also on the home front, and railroads and the railway supply industries must keep Washington constantly aware of the importance of the railroad plant and the materials which are required for it. The nation, he emphasized, must have a smooth functioning system of transportation to win.

Gloomy Tie Outlook

Although railroad traffic has increased over 35 per cent and cross tie renewals should be made at a higher rate because of these increases, tie production was almost brought to a standstill late in 1942 in the area from which the Great Northern obtains its requirements, according to A. N. Crenshaw, purchasing agent. This, he said, was largely because of delays in readjusting cross tie regulations in Washington. Tie production for the year was substantially less than in the previous year, and he estimated that not more than 80 per cent of the number of ties produced last year would be produced this year. The situation growing out of a demand for forest products and the decline in tie-producing manpower, as well as the dislocation of prices in competing areas, is not only far from encouraging but is critical, and extreme measures must be taken to conserve the ties in track and to increase their production this year, he pointed out.

D. C. Curtis, chief purchasing officer of the Chicago, Milwaukee, St, Paul & Pacific, said that the railroads had performed a monumental job in reclamation and in using substitute materials in repair work, going so far as to use solder containing no tin, steel pipe for copper pipe, non-ferrous metals for ferrous metals and untreated ties for treated ties; and the day is coming, he said, when the railroads are going to have to pay for some of the things they are doing in their efforts to conserve materials and reduce their requirements of scarce materials. In the face of the emergency, however, he emphasized, reclamation and conservation must be carried on even more intensively, and he urged railway men to avoid making the mistake, on the one hand, of not thinking up new methods, and the mistake, on the other, of not adopting methods which they find in useful operation on other railroads.

E. A. Clifford, general purchasing agent of the Chicago & North Western, explained that machine tools and other special materials requiring capital expenditures in excess of $500 and also authority for yard extensions and other special construction projects must be applied for on forms PD-1A and PD-200, respectively, and cautioned engineering and mechanical forces to use greater care in furnishing the facts necessary to satisfy war agencies that the materials and projects should be authorized. General statements are not enough, he said, but, instead, applicants must show exactly in what way the projects are essential in the war effort and what efforts have been made to use other methods or other materials and to save scarce materials in the undertaking. He also cautioned railroads against assuming that recent revisions of Order L-41, governing construction, removed all restrictions on track extensions, explaining that the order does not permit the use in track extensions of materials which were obtained under priority orders for other purposes. The address of the principal speaker follows in part:

Material for Railroads

By A. C. Mann*

Materials needed for railroad operation, all of which must be purchased and cared for, reach the astounding total of some sixty to seventy thousand items. The work is performed by purchases and stores departments which report on many railroads to the same executive officer. This form of organization provides centralized control over procurement of and caring for all materials and supplies used. We are a service department and our primary function is to procure and deliver to con-

* *Vice president, Illinois Central.*

suming departments what is needed when it is needed for the operation of the railroad. Those who buy and store railway material could not possibly function in an efficient manner, however, without the splendid co-operation they receive from all other departments of the railroad.

Standard practices and methods recommended for purchases and stores department operations include the requisition-order form which saves much time and typing in the purchasing office; the delivery of material by the stores departments direct to the user at shop points; pricing of material requisitions from prices placed on the bins; the one-line stock book; purchasing supplies in standard packages; and uniform methods of reclamation and scrap handling. Every railroad is daily becoming better organized along the lines recommended for purchases and stores departments and as a result is giving better service to the using departments and preparing more intelligently the orders which go out to the suppliers. Supply departments do not have the same yardsticks which other departments have for comparisons of operations and costs, one railroad with another, but we do have the same incentive to keep the total cost of handling materials down to a minimum and keep as well balanced an inventory as possible.

Many Changes

Since the outbreak of the war in Europe in 1939, purchasing and storekeeping have undergone many changes from their normal operations. They have not been able to exercise complete freedom of action and are subject to remote control from various bureaus in Washington. One serious handicap which has been difficult to overcome was the placing of the transportation industry under civilian supply rather than with the Army and the Navy.

During 1941, moreover, industry was gradually converted from normal to war production. Construction of war plants spread across the country and the use of steel, copper and aluminum by civilians was gradually placed under various restrictions. With the co-operation of the Priorities division of the Office of Production Management, the railroads received one of that division's early preference orders, P-8, for procuring material for repairs to freight cars. This was followed by a similar order for locomotive material. A third order for material for other repair and maintenance work was unfortunately included with an over-all repair order for all industry and never gave the needed help on these items.

To relieve this condition, which grew worse with the expansion of war production, a new preference order to cover all maintenance material needs of the railroads was prepared in September, 1941. Soon after, industry branches of the War Production Board were formed which included what is now the Transportation Equipment Division. Priority needs of the railroads were fully recognized, however, until April, 1942, when the well-known P-88 order was finally issued. Under the terms of P-88, tabulated requests for material needs for quarterly periods were submitted by each railroad and priority ratings were applied by WPB in time for use during the quarter. In case of unexpected vital needs, special interim assistance could be had for delivery of a definite item or quantity.

New Material Control

The priorities system as administered by WPB, however, has resulted in continual demands for critical materials considerably in excess of quantities regularly purchased. With the thought of holding the total requirements for any critical material within the quantity which can be produced for the deliveries requested, a "controlled material plan" is now being tested under WPB direction. Originally, the national requirements for so-called critical materials were to be assembled by the War, Navy, Maritime, Aircraft, Lend-Lease, Economic Warfare and Civilian Supply agencies, and railroads were considered under civilian supply, while there are now 14 Claimant Agencies, including the Office of Defense Transportation, which represents the railroads. The requirements are assembled first in totals on an annual basis and later in detail for quarterly requirements. The total quantities available will be divided among the agencies according to relative importance and in turn divided by each agency among its various applicants.

For the railroads, this means a continuation of the present system of quarterly application for quantities of designated materials, termed CMP materials, in units of weight, and for all other items in units of value, divided into AAR material classes. On certain items of CMP materials, steel and alloys, copper and alloys and aluminum, an allocation will be given each railroad requiring positive delivery in the month specified with an extension of 15 days before and 30 days after the current month. On other CMP materials and all other requirements, priority ratings will be assigned high enough to provide the required delivery. The Controlled Materials Plan is intended to remove the element of uncertainty surrounding material deliveries. Allocations and priorities will be provided for only such quantities as are available, and the practice of assigning low ratings when the demand is too great will be eliminated.

Railroads Will Co-operate

We are at present in the trial period for the Controlled Materials Plan. It will be in total use by industry as of July 1, 1943. We do not know whether its effect will be good or bad. In theory it should be good. I think I can confidently say that railroad purchases and stores officers are going to co-operate fully to make it a success. The fact that the railroad industry is scattered over 48 states under the same type of inventory control as a mass production manufacturing plant is a difficult hurdle. If it can be hurdled, railroad purchases and stores men will do it. A fact which should be remembered by all who have the responsibility of ordering material is that priority help is primarily given to obtain materials for maintenance, operation and repair of existing properties. Where materials are required for other purposes, we must convince WPB that what we want has a very direct relation to winning the war.

Under present Order P-88 we do not have priorities for the acquisition of materials or equipment classified as capital expenditures in excess of $500, for expansions necessitated by increased operations, for new construction where the cost exceeds $1,000 or for certain scarce commodities which are under more rigid control by WPB. To obtain a priority for materials or equipment falling into any of these categories, special application must be made. More often than not such applications are disapproved or a valueless priority is granted. When that occurs, it is necessary to appeal the case and generally, after much pleading, WPB will, if arguments presented are convincing, provide a better rating if it is decided that the materials can be spared for the purpose. This is not a criticism of WPB. Its job is to allot available materials for the needs most essential to

winning the war and the distribution of materials must continue to be made on that basis for the duration.

The Transportation division of WPB is staffed by men recruited from the railroads and the railroad supply industries who know the uses of materials. Generally speaking, these men have shown judgment and understanding, both in aiding the railroads to obtain needed materials and in applying restrictions to administer the rulings of WPB. To these men I want to pay tribute. In saying "well done" for their past performance, I also ask for their continued helpful assistance under the new Controlled Materials Plan. I should like also to pay tribute to the unselfish contribution which Warren Kelly is making by serving in the Supply and Equipment section of the Office of Defense Transportation. His knowledge of railroad needs enables him to be very helpful, and I know all appreciate the service he is giving.

Substitution and Salvage

The scarcity of critical materials—steel, alloys, rubber, copper, aluminum, etc.—made it necessary early in 1941 to get joint committees of the various divisions of AAR at work on substitutions for the critical items. Purchases and stores men took a very active part in this work and are appreciative of the fine work by the mechanical and engineering men in this direction. This is a continuing subject for experience has shown that a substitute for a critical material soon itself becomes a critical item and we have to start all over again.

In reclamation, which has always been an active subject to stores department men, special emphasis became necessary with the hope that further exploring of reclamation practices might develop quantities of used or second hand materials which would make it unnecessary to purchase new materials. Division VI-AAR has recently issued a booklet on practical reclamation work which is extremely beneficial. This is another phase of railroad operations where the mechanical and engineering departments have been very co-operative. The stores department has borne the brunt of the drive for scrap and salvage which has been kept so actively before us lately. The railroads are entitled to a merit award for their consistent and intelligent efforts on this subject.

Material Needs in '43

The railroad industry is doing a superb job in handling freight and passenger traffic that are far larger in volume than in any previous period, and by all the rules of logic or reason, the railroad plant, including roadway, rolling stock and locomotives, is going to require greater maintenance and renewals in 1943 than ever before. All this adds up to a larger quota of material, equipment and labor. The toughest days are still ahead. The war must be won not only on the fighting fronts, but also on the home front. Industrial production for the armed forces and defense agencies must be kept at a peak, and railroad transportation must be kept in condition to continue to play a leading role in the war effort. Railroad men and men in the railroad supply industry must be active and alert to keep the proper agencies in Washington informed as to the importance of keeping the railroad plant in good order and as to the materials that are required. We need a smooth functioning system of railroad transportation to win.

A Noted Economist on the $25,000 Salary Ceiling

When the usual reader learns from his paper that one of the leading questions facing Congress is limitation of incomes to $25,000, net, he is likely to shrug his shoulders and conclude that here is one thing he doesn't need to worry about. He never expects to receive $25,000 a year. . . .

Many economists strongly oppose any limitation on incomes. On what do they base their arguments?

They point out that, up to date, those nations in which competition has been most free are the ones in which progress has been most rapid, wages have advanced most, and the common people have enjoyed the greatest prosperity. The essential characteristics of free competition are:

1. The government lays down the rules of the game and thereafter avoids interference except to assure fair play.

2. Rewards for success are very high. This encourages every competitor to use his talents to the fullest extent.

It is obviously true that if, after the game is played and the prizes won, the government steps in and confiscates the prizes, the players cannot be expected later to enter into the contest with the same vigor as before.

But this is wartime. Does not patriotism now furnish sufficient incentive to make each man do his best? Such does not seem to be the case with laborers, for they have everywhere been striving vigorously for wage advances, in many cases striking to enforce their demands. Are all laborers unpatriotic and all captains of industry superpatriots? Now is when efficiency in management is most needed. A decrease of even 2 or 3 per cent in the efforts of management will probably more than offset any revenues gained by the government through income limitation. To assume that, if rewards are taken away, managers in general will not curtail their efforts more than 2 or 3 per cent, stretches one's faith in human nature very far.

The average man is also likely to overlook the fact that, in a capitalistic society, most of the funds needed to finance industry come from the savings of the wealthy. If the government, by taxing away the incomes of the rich, makes such saving impossible, private industry will not be financed. The reason that, today, the average working man in an hour earns three to ten times as much as his grandfather, is that he now works with equipment costing $5,000 to $10,000—an amount equal to his total earnings for several years. However, the money to pay for this equipment did not come from the savings of workingmen. It was nearly all saved out of the high incomes of the wealthy. If the government had always taxed away the savings of the latter class, the workingman would still be getting a dollar a day instead of a dollar an hour.

But why not levy the tax and let the government do the savings? This question brings up the crux of the whole issue. When the government does the saving, it owns the industries of the nation, and private enterprise is out. Furthermore, there is as yet no indication that a socialistic state can function effectively without a dictatorship.

Perhaps, after all, this question of limitation of private incomes is a matter of consequence to the average citizen. Perhaps he prefers an economy in which the boy with brains and perseverance has a chance to make a million and keep it. Perhaps he has doubts concerning a system in which private endowment of colleges, research institutions, and the like will be impossible because no private fortunes will exist. . . . At any rate, it is worth his time to think the matter through, possibly writing his conclusions to his Senators and Congressmen in Washington. He will find valuable material on this problem in the free bulletins of the Committee for Constitutional Government, 205 East 42nd Street, New York City.

—From a Letter by Professor Willford I. King to the Wall Street Journal

Railroads Are Called Profiteers

OPA economist opens testimony in Ex Parte 148 with exposition of policy providing lower rates, higher wages, "reasonable" profits, and alleged prosperity

WASHINGTON, D. C.

A CHARGE that the railroads are guilty of war profiteering and out of step with the national economic stabilization program adopted by Congress and put into effect by the President's executive orders was the opening gun in the 1943 drive of a group of government agencies against the existing level of railroad freight rates and passenger fares.

This contention was voiced by Max Swiren, special counsel for Economic Stabilization Director James F. Byrnes and Price Administrator Prentiss M. Brown, before a special panel of the Interstate Commerce Commission in hearings reopened in Washington, D. C., in Ex Parte 148, the case in which the commission early last year, following the 1941 railway wage increases, authorized general increases in rail passenger fares and limited advances in freight rates.

As reported in *Railway Age* of January 9, page 175, the commission's consideration of the railroad rate structure was ordered reopened after the then Price Administrator, Leon Henderson, on December 4, 1942, petitioned for cancellation of the increases allowed last year in this case, contending, first, that they "yield unreasonably high net earnings" to the railroads, and, second, that the success of the government's price control program is imperilled by the inflationary pressure of these rate increases on the general price structure.

The special panel selected to preside at the reopened hearings consists of Commissioners Clyde B. Aitchison, chairman, Walter M. W. Splawn and Charles D. Mahaffie. Several members of state regulatory bodies also sat with the commissioners. Proceedings began at 9 a. m. February 2 in the commission's large hearing room, which was filled beyond its seating capacity with representatives of federal, state and local government agencies, railroad officers and counsel, and observers for shippers, industrial organizations and others concerned with railroad rate changes.

After the preliminary admonitions concerning forms of procedure, the presentation of the government agencies' case was undertaken by Mr. Swiren, who prefaced his statement by saying that in the circumstances the burden of proof rests with the carriers and that the petitioners for whom he spoke did not assume it. Launching into what was designed to be a fairly detailed outline of the economic and legislative background of the administration's price control policy and a summary of the grounds on which the petition for a rate reduction was based, the counsel's exposition was sharply interrupted by Commissioner Aitchison, who requested that the case be presented through the testimony of witnesses.

I. C. C. Has Share in Inflation Control

Then considerably abbreviating his prepared statement, Mr. Swiren proceeded to discuss the "unyielding limitations" of the national economic policy as expressed in the Emergency Price Control Acts of January and October, 1942, and relevant executive orders, which, he asserted, impose responsibility for the control of inflationary tendencies on *every* agency of the government exercising control over prices, wages or profits. Through the definition of national defense written into the Interstate Commerce Act by Congress, he added, the Interstate Commerce Commission shares that responsibility.

In a volatile wartime situation any increase in costs is inflationary, Mr. Swiren said. As the policy of controlling price increases has been determined by Congress it is not a matter for the commission to decide, he argued. As Congress has said that control is called for, then regulatory measures are necessary, and the action of the commission in the recent Texas rate decision (see *Railway Age* of January 2, page 145) in "weighing" and taking notice of inflationary tendencies was inadequate, the OPA counsel declared. Instead, he went on to say, the commission on its own motion not only should revoke the increases, as a curb on wartime profiteering by the railroads, but should consider in addition reductions in pre-war rates.

"In projecting the railroad picture for 1943, we do not intend to overlook the pending demands of railway workers for further adjustments in their wage rates," Mr. Swiren said further. "We shall not speculate as to what the outcome will be. . . . But we have a right to assume that any wage adjustments will be in keeping with the established stabilization program. Any increases of that character, however liberal, can readily be absorbed from the inflated profits of the railroads. They will in no respect jeopardize the overly generous earnings to be realized in 1943."

OPA Opposes Segregation of 1942 Increase

Referring to the request of the commission, made public with its formal notice of the hearings, that parties to the proceedings should comment on the "desirability, feasibility, and legality" of segregating revenues derived from the 1942 rate increases to be applied to betterments or debt reduction, Mr. Swiren stated that the OPA regards the proposal as undesirable. A wartime economy cannot afford any charges not immediately essential, he said, and the suggestion that the war economy shall "subsidize any industry to provide post-war cushions is unthinkable."

Continuing in this vein, the OPA counsel declared favored treatment of such nature granted one industry would have to be granted to others, and to farmers and wage earners as well. Administration of economic stabilization policies cannot be influenced by the past adversities of a particular industry, his statement added. Price control would fail and serious inflation would follow "if post-war featherbed protection were accorded every wage earner, every industry, and every branch of agriculture."

The first and principal witness presented by the government agencies represented by Mr. Swain—the OPA and the OES—was Dr. Richard V. Gilbert, former Har-

vard University professor, who since 1940 has been director of the defense economics section of the OPA and its predecessor organizations, and is the principal economic adviser to the Price Administrator. His direct testimony and cross-examination continued until late in the afternoon of February 3, the second day of the hearings, and ranged widely over the field of economics and the philosophy of price stabilization.

Prefacing his remarks with a definition of inflation as "any increase in price whatever," Dr. Gilbert—who stood before the bench in the attitude of a classroom lecturer through most of his first day on the stand—offered the commission panel an extended discussion of elementary economics. This phase of the proceedings was occasionally enlivened by verbal clashes with Commissioner Aitchison, whose interposed questions seldom elicited the direct "yes or no" answers he sought.

Stabilization Program Is Working

Supported by an array of statistical exhibits, reports and documentary statements, the witness began his explanation of OPA's reasons for petitioning for cancellation of rate increases by the assertion that the economic stabilization program that became effective in 1942 had halted the rise in costs of materials used by the railroads which previously had been anticipated, so removing one basis on which the railroads sought and obtained rate increases in Ex Parte 148.

Digressing to discuss one of the questions raised about OPA procedure in this case when it was before the commission early in 1942, Dr. Gilbert explained that the OPA did not at that time, in view of the uncertainties growing out of the country's then recent entry into the war, feel prepared to oppose rate increases. In large measure these uncertainties have been clarified since, especially by the adoption of the economic stabilization program, he indicated, and the OPA's grounds for taking action grow from that development.

In general, the witness said, it has been OPA policy in setting price levels to allow for profits, before federal income and excess profits taxes, of 4 per cent on the average 1936-39 investment, applied on an industry-wide basis. Price control, he conceded, is not fair and equitable to every industry, or to every individual unit within an industry. Where serious inequalities are shown to exist, it is proposed, he added, to adjust the general price levels established by "freezing" on the March, 1942, basis, to eliminate them where possible, and to arrive at a more equitable price stabilization as of September 15, 1942. The executive order under which the stabilization machinery operates directs that prices be set to permit no more than reasonable earnings to industry, he continued, and the OPA is now reviewing its price schedules to comply with that direction.

Revisions of price schedules effected as the result of these situations will result in some increases, Dr. Gilbert agreed, but he asserted that the price level of materials used by the railroads, including fuel, will not increase "appreciably"—which he subsequently defined as not over 6 per cent—over the rest of the war period, and may instead decrease moderately as compared with current levels.

The witness then discussed figures prepared under his direction by which annual fluctuations in railroad income in various stages were set forth. These tabulations show, Dr. Gilbert acknowledged, that average annual railroad net income before federal taxes for the 1936-39 period was low as compared with other periods, amounting to $87 million as compared to an average of $686 million in the 1921-1930 period, for example. Nevertheless, he declared, this 1936-39 period was set by Congress as a basis for price stabilization and is for industry generally a period of reasonable income.

Railroad Profits Exorbitant

Because railroad "profit before federal taxes" in 1942—amounting to some $1,730 million—represents an increase of 1922 per cent over the average annual income before federal taxes in the 1936-39 period, the witness said, it is the conclusion of the OPA, determined by the price stabilization policy based on this 1936-39 period, that present railroad rates are grossly exorbitant and unreasonable. Even bringing railroad rates back to the 1941 levels would not alter this conclusion, based on the OPA's standard of measurement of reasonableness, he emphasized, as this reduction—amounting to about $450 million from the 1943 income before federal taxes of $3050 million predicted by the OPA—would still leave an income before taxes earned with the rates effective in 1941 well above the 1942 "profit" with the higher rates.

Defending his estimates of 1943 railroad income, the witness explained that they were based on the assumption that passenger revenue would increase in 1943 by 48 per cent over 1942, while freight revenue would increase 15 per cent. In arriving at the passenger figure he assumed that passenger travel in 1943 would, on the average, remain at the level of December, 1942, which the railroads have proved they can handle, while the forecast of freight traffic weighed a number of factors, including an expected increase in the proportion of government shipments handled, some decrease in construction projects, and a sharp curtailment of production for civilian use, resolving in the end into higher grade traffic traveling a longer distance than in 1942.

Of the increase in revenues earned in 1942 as a result of the increased rates allowed by the commission in Ex Parte 148 about 60 per cent was paid directly or indirectly by the government, Dr. Gilbert asserted. Commissioner Aitchison inquired whether this ratio applied to the proportion of the increase derived from higher passenger fares, but the witness was unable to answer. He conceded that government freight constituted much less than 60 per cent of all freight traffic in 1942, but contended that the government pays indirectly the increased revenue derived from this part of the total.

1943 Income Will Absorb Wage Increase

Having stood through the first day of his appearance before the commission panel, and a part of the second, Dr. Gilbert sat while concluding his direct testimony and responding to cross-examination. Discussing the pending wage increase applications of the railroad unions, he asserted that even if a wage increase of $750 million per annum should be allowed by the federal agencies responsible for wage stabilization, the income the railroads will earn in 1943, according to OPA predictions, could absorb the increase and still leave the railroads better off than they expected to be in 1942. This, he added, would be true whether the 1943 income is figured on the basis of existing rates or those in effect in 1941.

When, somewhat later, Commissioner Aitchison asked the witness what weight the OPA gives to the long-term policy of the government toward the transportation industry, as expressed in the Transportation Act of 1940, he obtained no answer beyond a confession of

ignorance of the policy expressed in the Act. Mr. Swiren came to the rescue of the witness at this point by asserting that the economic stabilization policy overrides any provisions of the 1940 Act. Dr. Gilbert then pointed out that the OPA's price stabilization program does not provide for post-war contingencies. This he qualified by saying that post-war stabilization of prices is not OPA policy, although it contemplates a stable post-war economy because it expects that prevention of wartime inflation, which is to be accomplished by price stabilization, automatically will result in prevention of post-war deflation.

On cross-examination the witness clarified his economic philosophy on a variety of points. The justness or unjustness of a particular price increase at this time does not enter into the consideration of preventing inflation, he said, as it is the OPA blanket policy that no price increase affecting the basic costs of living or of conduct of the war is justified. "Post-war survival of the American economy" he declared to be the primary objective of the OPA.

Commissioner Splawn pressed the witness for explanations of his conception of some fundamental terms such as "profit," "reasonable return," and "risk." His answers developed into an assertion that considerations of risk have nothing to do with an appraisal of the reasonableness of railroad income. At another point Dr. Gilbert smilingly agreed that there is no *good* time for increasing rates, though he thought now is a good time to lower them.

New Books...

Railway Engineering and Maintenance Cyclopedia. Edited by Elmer T. Howson, western editor, Railway Age, and editor, Railway Engineering and Maintenance, and C. Miles Burpee, managing editor, formerly research engineer, The Delaware & Hudson R. R. Corp., assisted by Herbert R. Clarke, chief engineer, Burlington Lines (Track Section); John B. Hunley, engineer of structures, New York Central System, Lines West of Buffalo (Bridge Section); Arthur L. Sparks, architect, Missouri-Kansas-Texas Lines (Building Section); Clarence R. Knowles, superintendent of water service, retired, Illinois Central System (Water Service Section); and Herbert G. Morgan, signal engineer, Illinois Central System (Signal Section). 1,224 pages, 2,500 illustrations. 8 in. by 11½ in. Bound in maroon fabrikoid. Published by the Simmons-Boardman Publishing Corporation, 105 W. Adams St., Chicago. Price $5.

The new 1942 edition of the Railway Engineering and Maintenance Cyclopedia deals authoritatively, thoroughly, and yet concisely, with all matters relating to railway engineering, maintenance of way and structures, and signaling and is essentially seven valuable books in one, including within its pages technical and practical data that are now available only in scores of books and hundreds of magazines, reports and pamphlets. Completely revised and rewritten by railway men, in co-operation with the American Railway Engineering Association and the Signal section of the Association of American Railroads, this book has won recognition as the outstanding guide to efficient track, bridge, building, water service and signaling practices. With 200 additional pages, 10 new chapters and new and revised data equivalent to 636 pages, enlarging its scope and thoroughness; profusely illustrated throughout with photographs, diagrams and tables, more than 1,250 of which are new; and with larger and more comprehensive indexes, the new volume marks a new high level in the series of Engineering and Maintenance of Way Cyclopedias produced by this publisher.

Specifically, the new edition includes descriptions of the latest developments in methods, materials, appliances, devices and work equipment now in use in the maintenance of way and structures field, which are closely co-ordinated with more than 250 manufacturer's pages, which are devoted to detailed descriptions and specifications of specific products. In fact, the entire book is arranged specifically to meet the exacting requirements of busy railway executives and the needs of their supervisory staffs.

Divided into eight sections comprising 99 chapters, the text has been assembled under their principal headings, in the respective divisions of track, bridges, building, water service and signaling. These technical discussions describe every phase of construction and maintenance procedure and are followed by a general section which includes discussions of materials, processes and equipment employed in more than one maintenance division. The definition section tersely defines more than 2,500 terms and expressions occurring in engineering and maintenance work and also serves as a general subject index. The final section comprises a directory of products, and indexes of trade names and manufacturers pages appearing in the volume, and serves as a complete cross-reference and a ready means of locating quickly specific data relating to all products described and referred to in the Cyclopedia.

The new edition includes new chapters on Roadbed Stabilization, Tunnels, the Repair of Concrete Structures, Bridge and Building Tools, and Standardized Buildings. In keeping with recent developments, the chapters on Concrete Masonry, Stone Masonry and Its Maintenance, Building Insulation, Scales and Scale Test Cars, and Pumps have been entirely rewritten, while extensive revisions have been made in all other chapters to include the latest information on all materials, products and methods, including the latest war time emergency specifications, as well as the standard specifications and recommendations of the A. R. E. A., the Signal section of the A. A. R., the A. W. P. A. and other prominent railway engineering societies.

Motor Traffic Management, by H. E. Stocker. Revised Edition. 369 pages. 9¼ in. by 6 in. Bound in cloth. Published by Prentice-Hall, Inc., New York. Price $5.00.

Commenting on the first (1938) edition of this book, the *Railway Age* review remarked on its simple, easily-read style and described it as a practical guide for the establishment and administration of a motor transport system. This evaluation can be applied to the revised version of the book, which retains the organization, the objective attitude, and to a large extent the text of the original.

Perhaps wisely, the author has not subjected his book to a major operation to include in it wartime dislocations of normal transportation practices. No attempt has been made to sketch the rapidly changing picture resulting from the efforts of the Office of Defense Transportation, the War Manpower Commission, the War Production Board, and numerous other government agencies to adjust the motor transportation industry's peacetime ways to the rigid limits of a wartime economy. In that respect, therefore, the revised edition is not a complete handbook in its field.

As in the first edition, the discussion of the construction and use of motor freight rates and tariffs is complete, clear, and authoritative. Forms and documents used in motor traffic operations are explained and illustrated. Federal regulation of motor carriers under the Interstate Commerce Act and the Motor Carrier Act of 1935 is the subject of a chapter that outlines the history and philosophy of regulation as well as its practical effects.

Railroad men will not agree with the author's partisanship on such topics as highway traffic subsidies and the relative merits of rail and road facilities for the movement of freight, and his statement that "approximately 98 per cent of the total railroad traffic consists of carload freight, which is not subject to motor truck competition," may be questioned by advocates of both forms of transportation.

Railroads-in-War News

Diversion Agent is Named at Chicago

Kirk is empowered to reroute transcontinental traffic to avoid congestion

Service Order No. 99 was issued by the Interstate Commerce Commission on February 3 to designate W. F. Kirk as the commission's agent at Chicago with authority "to divert or reroute transcontinental carload freight traffic from the line of any railroad or railroads, which in his opinion cannot currently accept and move such traffic, over the line or lines of any other railroad less congested, and in a better position to handle the traffic." The order became effective February 3, and remains in force "until further order of the commission."

The commission's action was taken "upon representations from the Office of Defense Transportation," and its appointee ties in with ODT; for Mr. Kirk, general manager of the Missouri Pacific, was on February 1 appointed regional director in charge of the Western region of ODT's Division of Railway Transport. The service order would seem to be a substitute for earlier proposals which would have involved the issuance of ODT orders, implemented by I. C. C. service orders, channelizing transcontinental traffic, i.e., confining shipments for certain destinations to specified routes.

I. C. C. reasons for issuing the order, other than the representations of ODT, were "the fact that certain railroads have recently been unable to transport promptly transcontinental carload traffic offered to them so as to properly serve the public; and that an emergency exists requiring immediate action to prevent shortage of railroad equipment and congestion of traffic and to promote the service in the interest of the public and the commerce of the people."

In his role of I. C. C. agent, Mr. Kirk is directed by the order to set up, subject to commission approval, an advisory committee "on which shall be at least one representative of the Office of Defense Transportation, and one representative of the Association of American Railroads." Also, he is directed to "avail himself of the facilities of the Association of American Railroads, its various departments, field offices, records, and reports."

The order further stipulates that, inasmuch as any diversion "is deemed to be due to carrier's disability," the applicable rates shall be those applicable on the shipment as originally routed. The carriers are directed to proceed without reference to existing division arrangements, although it is suggested that divisions of rates on traffic moving under the order should be agreed upon voluntarily. If there is failure to agree, the commission will fix the divisions.

Another Travel-Certificates Bill

Senator Davis, Republican of Pennsylvania, has introduced S. 615, which like other bills previously introduced proposes to issue furlough travel certificates to persons serving in the armed services.

New ODT Inland Waterways Director

Glenn E. Taylor has been appointed director of the Office of Defense Transportation's Division of Inland Waterways, succeeding Edward Clemens, resigned. Mr. Taylor has been deputy assistant to Ernst Holzborn, assistant ODT director in charge of waterways transport; he was formerly New Orleans, La., district superintendent of the Federal Barge Lines, operated by the government-owned Inland Waterways Corporation.

Converted Container Cars Will Move Kerosene

Converted container cars designed to carry five large steel tanks are expected to provide facilities for the annual movement of 12,000,000 gallons of kerosene into the New England states, according to a February 3 announcement from the Office of Defense Transportation.

The announcement followed upon the War Production Board's approval of the conversion program for 100 cars which will require a total of four and one-half tons of steel.

The container cars are low-side gondolas now used for cement traffic; they are owned by the L. C. L. Corporation and will be leased to the Pan American Petroleum & Transport Company. Conversion costs as well as the extra shipping and handling costs of the kerosene (expected to be about 1½ cents a gallon initially) will be borne by the Defense Supplies Corporation.

The ODT announcement revealed also that DSP will likewise finance the construction of 50 "balloons" for installation in converted rail box cars for the emergency transportation of fuel oil. The linings, Soldine Flexitanks, will be made of canvas processed with a rubber substitute; and each car will have a capacity of 10,000 gallons. While the converted container cars will carry kerosene from Texas City, Tex., to Chelsea, Mass., the converted box cars will be assigned to other sections of the country, thus releasing tank cars for the East-coast "or other essential services."

Agree to Promote Manpower Program

Rail and labor executives unanimous on "statement of principles"

Working under the auspices of the Office of Defense Transportation for the "alleviation of manpower problems in the railroad industry," spokesmen for the regional railroad executives' associations and railway labor organizations last week agreed upon a 13-point program in the form of a "statement of principles," which leaves to individual managements and system labor organization representatives the job of carrying out "each step by agreement." The program, which the conferees agreed unanimously to recommend, contemplates among other things the relaxation of road mileage limitations, and of hourly limitations and operating rules in yard service.

Making public the results of the conference, which was held on January 29, Director Eastman, as the ODT press release put it, "heartily commended the action taken." Mr. Eastman said that the conferees had "approached the difficult problem of railroad manpower in a spirit of genuine cooperation," adding that "if the principles agreed upon are applied in the same spirit, as I am confident they will be, the program should be of real assistance in meeting the manpower needs of the railroads."

Meanwhile the announcement also said that the management and labor representatives had "emphasized that they were not seeking to change the provisions of any existing labor contracts." In other words, "if any changes in such contracts were required, they were to be made by agreement between the appropriate officials of each railroad and the appropriate system representatives of the respective labor organizations." Where more than one labor organization was involved, "the agreement of all affected labor groups would be required."

The 13-point program, as set forth in the ODT announcement, follows:

1. Relaxation of yard operating rules to permit crews delivering cars to the yards or tracks of another road to haul back cars to their own road, so as to give the engine a load in both directions.
2. Continued employment, as long as physically able, of men eligible for retirement under the Railroad Retirement Act.
3. Cooperation of management and workers to reduce absenteeism to a minimum.
4. Relaxation of road mileage limitations and of hourly limitations in yard service.
5. Efforts by labor and management to work present forces full straight time and to distribute uniformly such overtime as may be required.
6. Upgrading and promotion within or with-

(*Continued on page 333*)

Says Roads Need More Equipment

McCarthy and Fletcher stress need for additional material allotments

The railroads should be allowed what they need in the way of new equipment and materials to keep the plant running, Henry F. McCarthy, director of the Division of Traffic Movement Division, Office of Defense Transportation, urged during a round-table radio discussion over Station WWDC in Washington, D. C., on February 2. The reason for this, Mr. McCarthy said, is that "carrying capacity must keep pace with productive capacity or production will suffer."

"The value of war equipment, munitions and supplies," he continued, "depends on our ability to place them in the hands of our men on the fighting fronts. By far the greater part of the mass transportation necessary to do this must be provided by the railroads." Mr. McCarthy expressed the opinion that "the railroads are going to have to do an even bigger and better job during the coming months than they did last year."

"Production for civilian use will probably be less in 1943," he conceded, adding, however, that "this will be more than offset by increased war production. Then, too, the size of our military forces will be greater, and more and more traffic will take to the rails because of gasoline and rubber restrictions. Synthetic rubber production for military use will grow rapidly in 1943, and the oil movement to the East will be increased, if possible."

R. V. Fletcher, vice president of the Association of American Railroads, declared that the railroads had planned for the job ahead, "especially since Hitler invaded Poland in September, 1939."

"As the war has progressed," he went on, "the railroads have tried to size up the demands that would be made upon them, and then have undertaken to put their plant in shape to handle the prospective traffic. That is one of the reasons why the railroads so far have been able to carry the load so successfully."

To help handle the expected rise in traffic, Mr. Fletcher said, the railroads are trying to get more equipment. They have asked the government for authorization to obtain 80,000 new freight cars and 900 new locomotives before next October, but the allocations have been at a rate somewhat lower than the railroads proposed. "However," Mr. Fletcher added, "the War Production Board has indicated that it will give the railroads' equipment and maintenance program further consideration very soon. It is to be hoped that this government agency will find it possible to let the railroads have the materials they absolutely need."

Describing the tremendous job that the railroads are doing, Holcombe Parkes, assistant to the president of the Southern, stated that in a single ordinary day recently, the railroads moved more than five million tons of freight an average of 400 miles per ton, and carried about two million passengers for an average distance of more than 100 miles per passenger.

"During that day," he said, "the railroads handled in organized movements, not including the men traveling on furlough, more than 50,000 troops and their equipment. They delivered to the ports more than 2,500 carloads of export freight, and considerably more than twice that much to the government's military construction projects all around the country. They delivered about a thousand carloads of food to the representatives of our allies under the Land-Lease Act. They hauled a million and a half tons of coal, and brought to the East approximately 34 million gallons of oil."

Mr. Parkes pointed out that "this particular day certainly was not unusual"; for "in the volume of transportation service performed by the railroads on that day, we just about hit the daily average for 1942. Multiply these figures by 365 and you can get a good idea of the tremendous transportation job that the railroads did last year."

ODT Mechanical Men Promoted

Shannon Kuhn, mechanical assistant of the Division of Railway Transport, Office of Defense Transportation, has been promoted to deputy director, and he has been succeeded as mechanical assistant by J. D. Loftis, Jr., who has been locomotive assistant.

Mr. Kuhn, who came to ODT last June, was formerly master mechanic of the New York Central at its Cleveland, Ohio, shops. Mr. Loftis, who has been with ODT since last August, was formerly associated with the Denver & Rio Grande Western.

I. C. C. Service Orders Restrict Movements into Mexico

Service orders No. 106 and 107 have been issued by the Interstate Commerce Commission to effect the prompt return from Mexico of freight cars owned by United States railroads. The orders became effective January 30.

Service Order No. 106 prohibits railroads from accepting carload shipments destined to Mexico unless they are covered by "straight bills of lading as defined in U. S. Code, Title 49, Chapter 4—Bills of Lading." The order states that shipments into Mexico covered by order bills of lading "have been, and are being, unduly delayed."

Service Order No. 107 directs the Association of American Railroads "to take immediate steps by the placement of necessary embargoes to restrict the number of freight cars owned or leased by railroads of the United States moving into Mexico during any semi-monthly period, so that the number of such freight cars shall not be in excess of the number of freight cars moving from Mexico to the United States during the previous semi-monthly period." It also stipulated that the number and type of cars permitted to be in Mexico at any time may be changed by instructions issued by the director of the I. C. C. Bureau of Service, "by varying the ratio between cars permitted to be moved into and those moved out of Mexico."

WPB's Regulation of Freight Begins

Sets up tank car zoning system which is "framework" for control of shipments

Described by the War Production Board as a "framework by which any type of shipment can be regulated as the need may arise," the first of a new series of orders covering transportation was issued January 30 by the WPB director general for operations, Curtis E. Calder. Designated General Transportation Order T-1, the order directly controls the use of tank cars and tank trucks for the movement of all commodities except petroleum and its products.

Because the order applies to shippers rather than carriers it was issued by the WPB, which has authority over the distribution of materials, and not by the Office of Defense Transportation, the authority of which is confined to the use of transport facilities, it was explained by Dr. W. Y. Elliott, director of the WPB stockpiling and transportation division.

The order establishes three types of controls over shipments, including reconsignments, which are designated as List 1, List 2, or List 3 materials. In addition the order provides that no commodity which is not included in one of the three lists may be shipped by tank car unless it is consigned to an Army, Navy, Maritime Commission, War Shipping Administration or Lend-lease agency or specifically authorized by the WPB director general for operations.

List 1 materials may not be shipped by tank car except by special authorization of the director general for operations, and such authorizations at present take the form of zoning permits designed to cut down "excessive hauling." List 2 materials may be shipped for the present without authorization, but monthly or special reports at least 10 days in advance of the time of shipment are required, so that the WPB may issue special directions or limitations designed to stop or divert those it does not approve. Form PD-782 is designated for making this report. Controls under List 2 of the order become effective March 1.

It is proposed to zone under List 1 many of the materials now included in List 2, the WPB statement points out, and one of the purposes of the reports required for all List 2 shipments is to provide information as to the supply and demand of the affected commodities which will serve as a basis for setting up zones within which it will be possible to continue shipments without making reports or filing applications for special authorizations.

List 3 is an all-inclusive list of materials which may be shipped in tank cars, including those restricted under the provisions of lists 1 and 2 as well as those not restricted under this order. With the exceptions mentioned above, commodities not included in this list may not be shipped in tank cars.

At present List 1 applies to only two

commodities, molasses and caustic soda. Effective March 1, shipments of molasses in tank cars for distances of 200 miles or more, except for the manufacture of yeast and citric acid, are prohibited, except on special authorization. Controls over caustic soda, which are to go into effect April 1, establish 13 zones limiting tank car movements of this material, and special permits are required for all shipments which cross a zone boundary. These zones vary greatly in area. Zone 9, for example, is the city of Chattanooga, Tenn., and Zone 5 is the city of Nitro, W. Va., while Zone 1 is all of New England and eastern New York, except the metropolitan district of New York City, and Zone 13 is all of California, Oregon and Washington and part of Nevada.

Reports in advance of shipments of materials in List 2 are required for all movements in tank cars, and for movements of 200 miles or more in tank trucks, except that the limit on truck shipments is 250 miles in the case of ethyl alcohol. The other commodities specified in List 2 are acetone, butyl acetate, corn syrup, ethyl acetate, and molasses for citric acid or yeast manufacture.

East Coast Oil Movement

Deliveries of petroleum and its products to the East coast were "about as expected" in the week ending January 23, Petroleum Administrator Ickes announced on January 29. Tank car shipments averaged 798,552 barrels a day, a decrease of 19,779 barrels per day, or about 2½ per cent, from the previous week.

Tank car deliveries into New England in the week ended January 23 averaged about 162,000 barrels a day, a decrease of 13,900 barrels a day from the preceding week. On the other hand, box car shipments of kerosene increased by an average of 3,265 barrels a day to a new high figure for this movement of 4,937 barrels a day.

During the week the new 82-mile emergency pipeline from the vicinity of Fostoria, Ohio, began to move gasoline into the so-called Susquehanna pipeline at Randolph, Ohio, for delivery to the Atlantic coast. Use of this line will not increase deliveries of gasoline in that area, it was pointed out, but will release tank cars which had been tied up in shuttle service, making them available for fuel oil movements.

Barge movements of oil were said by Mr. Ickes to be continuing "at a high level." Operations on the Ohio and Mississippi rivers are recovering from the effects of floods and high water, and domestic heating oil is moving in increasing volume in the joint operation which involves a pipeline run to Helena, Ark., from the producing fields in Louisiana and Texas, a barge haul from Helena to Cincinnati, Ohio, and tank car movement thence to the East coast.

Approval of applications for more than 320 of the 892 new tank semi-trailers authorized recently by the War Production Board was announced February 1 by ODT Director Joseph B. Eastman, who said that within two months or less most of these units will be in operation, releasing tank cars for longer hauls. Arrangements have been worked out with the War Department to amortize the cost of these units within the war emergency period, he announced.

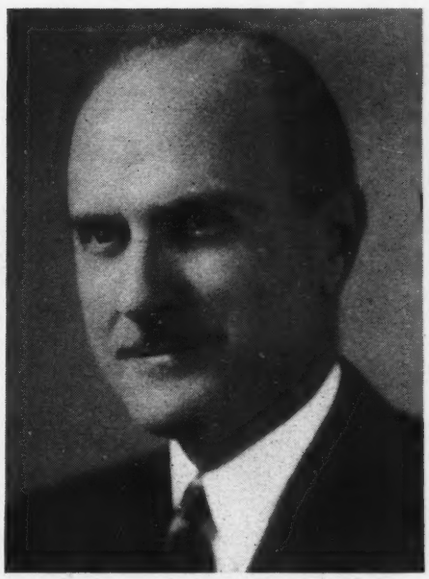
ODT Appointment

Alvin S. McEvoy has been appointed associate director of the Office of Defense Transportation's Division of Motor Transport, succeeding Ray G. Atherton, who has resigned to become general manager of American Trucking Associations, Inc. Mr. McEvoy had been Mr. Atherton's principal assistant since last March.

Before joining ODT he was a district supervisor of the Bureau of Motor Carriers, Interstate Commerce Commission, and prior to that time he had served as superintendent of motor bus operations of the Wisconsin Motor Bus Lines, and traffic manager of the Motor Transport Company, both of Milwaukee, Wis.

Kelly Replaces Kelly in ODT

Appointment of H. H. Kelly as director of the Division of Material and Equipment Requirements of the Office of Defense Transportation was announced January 28 by ODT Director Eastman. The new division director replaces in that position Warren W. Kelly, who asked to be relieved of the responsibility of directing the division on account of his health, though he will continue his association with it in a consulting capacity.



H. H. Kelly

The Division of Material and Equipment Requirements was set up January 1 of this year to perform functions in which the ODT serves as claimant agency for domestic transportation under the Controlled Materials Plan of the War Production Board. H. H. Kelly since early in 1942 had been chief of the Allocation Section of the ODT Division of Motor Transport, and at the time of the present appointment was also serving as assistant director of that division. Matthew E. Kane replaces him as chief of the Allocation Section.

Born in Bloomfield, Ohio, in 1897, H. H. Kelly attended the University of Pittsburgh before entering government service in 1923. He was first employed in the automotive division of the Department of Commerce, and from 1925 to 1928 was that department's first automotive trade commissioner in Europe. He then left the government service, and in the two following years was special export representative in charge of the Asiatic territory for the Hudson Motor Car Company.

After serving as secretary of the Fourth International Road Congress in Washington, D. C., in 1930, Mr. Kelly returned to government service in the capacity of assistant chief of the division of highway transport in the Bureau of Public Roads. In 1935, he joined the staff of the Interstate Commerce Commission, where he was the first chief of the Section of Safety in the commission's Bureau of Motor Carriers.

Rail Manpower Committee Considers Replacement Schedule

The Rail Manpower Committee, appointed at the request of the Office of Defense Transportation to represent Class I roads, "has given favorable consideration to the Replacement Schedule which has been prepared by the Selective Service System to provide an orderly control of the withdrawal of Selective Service eligibles from industry," according to a January 28 announcement from ODT.

The announcement reported on a meeting last week where the schedule was explained to the committee and to representatives of ODT's Division of Transport Personnel by Lieutenant Colonel B. S. Shumate of the Selective Service System. The schedule, as the ODT press release put it, is "designed to provide for the systematic replacement of those men who must be made available to military service"; but when approved by the Selective Service System it will "give employers voice in the order in which men of the same draft status will be called."

Also discussed at the meeting was the preparation of the Manning Table, designed by the War Manpower Commission. This was explained by Brigadier General William C. Rose, who told how the table "will help industry appraise its own manpower problems and determine what measures should be taken to meet personnel shortages." Sub-committees of the Rail Manpower Committee, at subsequent meetings last week, were reported to have considered an adaptation of the Replacement Schedule and of the Manning Table to the needs of the railroads; and plans "for the consolidation of labor statistics requested from the railroads by various government agencies."

Meanwhile at the general meeting the representatives of the Manpower Commission sought cooperation of the railroads in developing a railroad training program. In that connection it was recognized that some of WMP's training facilities are already being utilized by railroads, the foreman training program having been "particularly well received." Other discussions at the meeting included a talk by Dorothy M. Sells, chief of the Personnel Supply Section of ODT's Division of

Transport Personnel, who recently returned from England, where she studied utilization of British women to meet manpower shortages in the transportation industries.

The Rail Manpower Committee is headed by Dr. Julius H. Parmelee, director of the Bureau of Railway Economics; while ODT representatives at the meeting were headed by Otto S. Beyer, director of the Division of Transport Personnel.

Later in the week ODT sponsored a similar meeting which was attended by the recently-formed Short Line Railroad Manpower Committee, headed by J. H. Huntt, secretary-treasurer of the American Short Line Railroad Association. Other recent ODT pronouncements on the transportation industry's manpower problems include that wherein Mr. Beyer asserted that the training of new personnel "remains the most serious problem to be met by the for-hire trucking industry"; and another wherein he announced the existence at the present time of "a critical shortage of almost 2,000 bus drivers, motormen and conductors in the local transit industry."

Eberstadt Creates Transport Requirements Committee

Formation of a Transportation Requirements Committee, which "will consider transportation requirements and priorities," was announced this week by the office of Ferdinand Eberdstadt, program vice-chairman of the War Production Board and chairman of WPB's Requirements Committee. Chairman of the new Transportation Requirements Committee is William W. Judson, general manager of the Northern Pacific, who will continue also as director of the WPB Program Bureau's Public Services Division.

As noted in the *Railway Age* of November 14, 1942, page 792, where his photograph and a sketch of his career appeared, Mr. Judson is on leave from the Northern Pacific, serving the government on a $1-a-year basis.

The Transportation Requirements Committee will include representatives of the Office of Defense Transportation, War Department, Navy Department, Maritime Commission, Office of Civilian Supply, Petroleum Administrator for War, Transportation Equipment Division, WPB, Division of Stockpiling and Transportation, WPB, Public Services Division (Program Bureau), WPB, and Automotive Division, WPB.

The announcement also said that the program vice-chairman "may appoint additional members." Dr. William Y. Elliott, director of the WPB Stockpiling and Transportation Division, will serve as vice-chairman of the committee. A photograph of Dr. Elliott together with a sketch of his career also appeared in the issue of November 14, 1942, page 790.

First Allotments Under CMP

Fourteen claimant agencies, including the Office of Defense Transportation, this week received from the War Production Board's Requirements Committee their first allotments of steel, copper, and aluminum under the Controlled Materials Plan. The allotments are for the second quarter of this year, but the WPB announcement pointed out that claimant agencies "are authorized to make plans for continuation of current programs into subsequent quarters on the basis of declining percentages of second quarter allotments."

Details of the distribution among the claimant agencies were not made public "for reasons of military security"; although it was revealed that the overall requests exceeded the 15-million-ton carbon steel supply by 17 per cent, the two-million-ton alloy steel supply by 15 per cent, the 600,000-ton copper supply by 16 per cent, and the 600-million-lb. aluminum supply by 14 per cent.

Thus presumably the ODT program was cut substantially; for WPB Chairman Donald M. Nelson said that "full provision" had been made for the current "must" programs, which he listed as "synthetic rubber, high-octane gasoline, aviation, army materiel, merchant and naval shipping and escort vessels." He added that "less essential programs have been cut to the bone."

Meanwhile, Ferdinand Eberstadt, program vice-chairman of WPB and chairman of the Requirements Committee, said that the allotments were "kept within our material budget"; and thus Mr. Eberstadt thinks that CMP has been launched with a view to achieving its main purpose "to assure delivery of material needed to produce approved programs, to deliver it on time in the exact amount."

Kirk Succeeds Johnston as Associate Director ODT

The resignation of C. E. Johnston as associate director in charge of the Western Region of the Division of Railway Transport of the Office of Defense Transportation was effective February 1, according to an announcement by ODT Director Eastman. Mr. Johnston's successor will be W. F. Kirk, assistant general manager of the Missouri Pacific.

Mr. Johnston's resignation will enable him to devote his entire time to his duties as chairman of the Western Association of Railway Executives, the statement added. His photograph and a sketch of his career appeared in *Railway Age* of March 14, 1942, page 562, at the time of his appointment to the ODT position.

In a letter accepting Mr. Johnston's resignation, Mr. Eastman said: "Our demands upon your time and broad experience have been many and heavy, but you

Railroading at Fort Worth Q. M. Depot

Second Lt. William H. Schmidt, Jr., formerly associate editor of *Railway Age* at New York, and until recently stationed at the Fort Worth Quartermaster Depot, took this picture, which was cleared for publication through regular military channels.

This is the group of military men and civilian employees who do the railroading around the Depot. Shown with the brake club is Captain George P. Kosub, Depot Transportation Officer, who works as a student brakeman when he can find the time.

The locomotive, the second on duty at the Depot, is known as Yardbird U. S. A. 6920. The old girl wore the Army's khaki in the last war, and was still vigorous enough to be accepted again for service in this one. She weighs 80 tons, without tender, and was built back in 1913 by Alco for the Rock Island.

This is the only locomotive photograph ever taken by a railroad fan, so far as is known, wherein mere human beings were allowed to blank out the wheel arrangement.

have discharged them with satisfaction and ensuing benefit to our activities. I am glad to know that even after you have taken the step upon which you have decided, my staff and I will be able to continue to have the benefit of counseling with you from time to time."

Mr. Kirk was born at Osage City, Kan., on August 19, 1881, and entered railway service in November, 1897, as a messenger on the Atchison, Topeka & Santa Fe, later

W. F. Kirk

serving as a trackman on that road. From November, 1899, to February, 1900, he was with the Wells-Fargo Express Company as a messenger, then going with the Pecos Valley (now part of the A. T. & S. F.) as a telegrapher. Later in the same year he was advanced to dispatcher, and after a short period in this position he took a similar position on the Michigan Central. In April, 1901, Mr. Kirk entered the service of the Missouri Pacific as a telegrapher and was advanced successively to dispatcher, chief dispatcher, trainmaster, assistant superintendent and assistant to the general superintendent of transportation. In December, 1917, he was appointed acting superintendent of the Wichita division, and in the following year he was made superintendent of the Central division, later being transferred to the Omaha division. In June, 1924, he was further advanced to general superintendent of the Western Lines, with headquarters at Kansas City, Mo., which position he held until 1934, when he was appointed eastern regional director on the staff of the federal co-ordinator of transportation. In June, 1935, Mr. Kirk returned to the Missouri Pacific as assistant general manager, with headquarters at St. Louis, and in March, 1936, he was appointed general superintendent of transportation. In May, 1941, his jurisdiction was extended to include also the Texas lines of the Missouri Pacific system. Four months later he was advanced to assistant general manager with headquarters at St. Louis.

A. A. R. Directors Meeting

Despite the fact that carloadings in recent weeks have been below those of comparable 1942 weeks, Director Eastman of the Office of Defense Transportation still thinks that 1943 freight traffic, as measured by ton-miles, will be 11 per cent in excess of the 1942 volume. Mr. Eastman expressed this view to directors of the Association of American Railroads at their meeting in Washington, D. C., on January 29.

He said that ODT had recently reexamined the 11 per cent estimate on which it agreed with the A. A. R. some time ago, and saw no reason to change it. Likewise, the current Bureau of Railway Economics estimate places the 1943 ton-miles from 10 to 11 per cent above 1942, while it now anticipates that passenger-miles will be up 20 per cent instead of the 15 per cent previously estimated.

Among the reasons which Mr. Eastman gave for adherence to the traffic-rise estimate were the increased demand for military transportation; the expectation that next season's lake-ore movement will be above 1942's record of 92,000,000 tons; the increase in shipbuilding; increased grain shipments following upon the release of storage space as grain moves abroad; the possibility of increased coal mining; and the prospects for further diversions from highway transport as truckers experience continuing difficulties as a result of the rubber shortage and their manpower problem which was said to be more acute than that of the railroads.

In connection with Mr. Eastman's listing of the prospective increase in grain shipments, it was pointed out that such shipments are already 22 per cent above 1942, due to the opening of some storage space. Also, the livestock movement is up 14 per cent; while iron ore stocks at the foot of the lakes were 18 per cent larger in December than in December, 1941.

Other traffic data presented at the meeting showed that the all-rail coal movement into New England in 1942 was 62 per cent in excess of the 1941 movement. Movement of New England coal over rail-water routes through North Atlantic ports was up 660 per cent, although it was explained that the 1941 movement was less than a half-million tons. At that time such coal was moving largely through the Hampton Roads ports. Latest passenger-traffic figures show that, for the first 10 months of 1942, passenger-miles other than commutation were up 51.5 per cent from 1941; while commutation passenger-miles were up 16.1 per cent. In October the non-commutation passenger-miles were 85.7 per cent in excess of October, 1941, while commuter passenger-miles were up 18.8 per cent. With respect to these October figures it was said that sketchy reports thus far available for later months indicate that the rate of increase fell off towards the end of the year.

Mr. Eastman was accompanied to the meeting by V. V. Boatner, director of ODT's Division of Railway Transport, and Henry F. McCarthy, director of the Division of Traffic Movement. Aside from their discussions with the ODT officials, the A. A. R. directors, as one attending the meeting put it, talked "ways and means of doing things." There is understood to have been some discussion of operations in connection with troop movements, while there was said to have been "a good deal of talk" about the fuel situation. Also discussed were the pending wage demands and the reopened Ex Parte 148 proceeding wherein the Office of Price Administration is asking the Interstate Commerce Commission to rescind the rate increases granted early last year.

Agree to Promote Manpower Program

(*Continued from page 329*)

out any group, seniority being retained in the original group, so as to bring about fullest possible utilization of training and skills of present employees and minimize problems of obtaining and inducting new employees.

7. Transfer of shop work from one railroad to another to meet critical labor shortages. Transfer of employees from one railroad to another, with preservation of seniority rights on original job.

8. More intensive on- and off-job training, and provision for some pre-employment training. Consideration of payment of compensation during pre-employment training periods.

9. Cooperative effort to encourage return of retired employees.

10. Relaxation, so far as practicable, of age and physical examination requirements.

11. Induction of new employees, so far as practicable, into lower skilled brackets so as to minimize the need for pre-employment training and to expedite on-the-job training.

12. Consideration of employment of women of railroad employees' families.

13. Relaxation of the present 16- to 21-year age limits for employment of shop craft apprentices, so as to permit training of men who will be able to remain in service.

It was announced that the labor and management committees would hold further conferences and make additional proposals with respect to recommendations 8 and 13, on training and age limits for employment of shop craft apprentices.

The management committee included J. J. Pelley, president of the Association of American Railroads; L. W. Baldwin, chief executive officer of the Missouri Pacific, and the following railroad presidents: M. W. Clement, Pennsylvania; E. W. Scheer, Reading; E. E. Norris, Southern; J. B. Hill, L. & N.; C. E. Denney, No. Pac.

Labor committee members were: G. M. Harrison, president of the Brotherhood of Railway Clerks; B. M. Jewell, president of the Railway Employees Department, American Federation of Labor; D. B. Robertson, president of the Brotherhood of Locomotive Firemen and Enginemen; E. E. Milliman, president of the Brotherhood of Maintenance of Way Employees; J. G. Luhrsen, executive secretary of the Railway Labor Executives' Association; T. C. Cashen, chairman of R. L. E. A., and president of the Switchmen's Union of North America; A. F. Whitney, president of the Brotherhood of Railroad Trainmen; Alvanley Johnston, grand chief engineer of the Brotherhood of Locomotive Engineer. Aside from Director Eastman, who presided, the ODT was represented at the conference by Otto S. Beyer, director of the Division of Transport Personnel, and V. V. Boatner, director of the Division of Railway Transport.

TRADE PUBLICATION

MOTO SWEEPERS. — The Moto-Mower Company, Detroit, Mich., has published new editions of its 4- and 6-page catalogs describing the Detroit, Commander and Fleetway models of manually-operated and self-propelled power sweepers. The catalogs are attractively printed in color and contain specifications on and photographs of the units.

GENERAL NEWS

Mediation Board One-Man Agency

Beyer on leave, Lewis retires, so George Cook carries on by himself

The National Mediation Board, now dealing with the nationwide railroad wage cases, was this week down to one active member—Chairman George A. Cook, who was left alone when David J. Lewis announced his retirement at the end of his term which expired February 1. The third member of the Board, Otto S. Beyer, was granted indefinite leave of absence a year ago to accept full-time service in his present role of director of the Office of Defense Transportation's Division of Transport Personnel.

Mr. Lewis, who is in his 74th year, had been a member of N. M. B. since June, 1939, when he was appointed to fill the unexpired term of Dr. William M. Leiserson who was transferred to the National Labor Relations Board. In January, 1940, he was reappointed for the full three-year term which expired this week. A former congressman from Maryland, Mr. Lewis was the New Deal's senatorial candidate in the unsuccessful attempt of 1938 to "purge" Senator Tydings.

Mr. Lewis advised President Roosevelt that he would not seek reappointment in a December 19 letter, which he made public this week. "I have," he wrote, "two reasons which impel me to retire, the first is that I am nearing my seventy-fourth birthday, the second reason is that I wish to be free, like Senator Norris, to aid in seeing made the 'just and permanent peace which ought to come out of this war.' Allow me to add that in serving you, though in an humble capacity, through what should prove the most epochal chapters in the history of the world, I have found the very highest satisfaction of my life."

Even before Mr. Lewis' retirement, the short-handed N. M. B. had given some concern to the railroad labor organizations, and to the Board itself. The labor leaders are understood to have asked President Roosevelt last September to appoint another member in place of the inactive Mr. Beyer whose term expires February 1, 1944. In its annual report for the fiscal year ended June 30, 1942, N. M. B. said that its backlog of unsettled cases suggested "the necessity of enlarging the staff of mediators as well as a restoration to the Board of its full active membership." In a statement issued this week, the Railway Labor Executives Association complained that "for nearly two years, the National Mediation Board . . . has been impaired by inadequate members and now there is only one member."

Pullman Employees' Suggestion Awards Treble in 1942

The Pullman Company Employees' Suggestion System closed its second year of operation in 1942 with 46,314 suggestions received and 5,660 adopted and with awards totaling $67,930, compared with the 10 months initial operation in 1941 when the respective figures were 22,550, 2,059 and $23,085. On December 11, 133 awards of $1,860 were approved.

No More Extra Fare on "Broadway Limited" After February 7

The "Broadway Limited" of the Pennsylvania will be operated as a regular fare train, effective February 7—the road having decided to remove the $3 extra fare which has been in effect since December, 1942. Prior to that time an extra fare of $5 was charged.

The $3 extra fare on the "Twentieth Century Limited" of the New York Central will, however, be retained.

Ruling on Employee Publications for Soldiers Overseas Revised

The Postmaster General has revised the ruling made on January 7, 1943, regarding shipment of employee publications to soldiers overseas. When the order was first issued, it was understood that employee publications could be mailed third class to soldiers specifically requesting to be placed on the mailing list. The present interpretation, however, restricts such publications to first class mail and limits the weight to two ounces. No specific request from a soldier is required in the case of first class mail.

The Army and Navy Employee Publication Section has expressed the hope that editors of "house organs" will find it possible to adapt their operations to the new regulation, so that service men will not be deprived of their copies. Various ways in which such publications may be brought within the two-ounce weight limit have been suggested. Many companies now issue special Service Men's editions. It is suggested that for such editions the front and back covers may be eliminated and the publication laid out to reduce bulk. Lighter paper stock could be used and the contents planned in such a manner that it would be possible to delete several pages from the regular edition without destroying continuity or interest.

Another "Timely" R. R. Wage Figure

Pension board comes through for third time with unions' favorite "average"

Coming through for the third time during the pendency of a wage case, the Railroad Retirement Board has again made available data like those which, in the other two proceedings, have supplied the railroad labor organizations with their favorite annual wage figures. The Board's latest compilation is for 1941, and it shows an average annual wage of $1,311 for all persons who had any railroad employment during that year, including 220,756 whose 1941 earnings aggregated less than $50 and 165,803 who had work in only one month.

Previous compilations with like figures for 1937 and 1939 were issued by the Board in the fall of 1938 when they were used by the labor organizations in their successful fight against the proposed 15 per cent wage cut; and in 1941, when they were used in proceedings leading to the increases granted in December of that year.

In those proceedings, management representatives contended that employees who had some work in each month of any year under review were the only ones who might properly be regarded as really attached to the industry. On that basis the "average annual wage" figure becomes quite different. Thus the Board's compilation shows an average 1941 wage of $2,009 for the 1,119,119 employees who had some work in each of that year's 12 months. This compares with a figure of $2,018, calculated on the basis of the mid-month count of employees, which was given by Dr. Julius H. Parmelee, director of the Bureau of Railway Economics, in his "Review of Railway Operations in 1941" which appeared in the *Railway Age* of January 3, 1942. In his review of 1942 which appeared in the issue of January 2, 1943, Dr. Parmelee gave $2,286 as the 1942 average.

In September, 1941, the Interstate Commerce Commission's Bureau of Transport Economics and Statistics made public a statement on railway wages which asserted that the mid-month-count basis "happens to give the correct result if one is interested in what a full-time worker can earn." Commenting on the Retirement Board's 1939 compilation, the Bureau said that it "throws light on the extent of part time employment, but without distinction as to whether the irregular work is due to seasonal irregularity, cyclical fluctua-

tions, death, sickness, or transfer to some other industry." Just as the railroad management representatives had done in the wage proceedings, the Bureau's statement took the position that the proper comparison (so far as one can be made) would be between the Retirement Board's average wage of those who had some work in each of any given year's 12 months, and an average based on the commission's mid-month counts.

The present Retirement Board compilation is in the form of its predecessors. Dated December, 1942, and entitled "Compensation and Service, Railroad Employees, 1941," it is a voluminous document containing tabulations classified as follows: I—Total by Class of Employer and Occupational Group; II—Class I Railroads by Occupation; III—Railway Express Agency, Selected Occupations; IV—Pullman Company, Selected Occupations; V—Male Negro Employees; VI—Female White Employees.

Taking the figures for those shown to have some employments in each of 1941's 12 months, the average annual wage figures for Class I railroad employees by occupations are given in the tabulations as follows: Executive, professional, and supervisory, $2,954; gang foremen, $2,018; clerical, $1,919; maintenance of way and structures, skilled, $1,934; extra gang men, $1,079; maintenance of way laborers, other than extra gang, $1,074; maintenance of equipment, skilled, $2,188; maintenance of equipment, unskilled, $1,317; helpers and apprentices, $1,614; station agents and telegraphers, $2,055; station and platform laborers, $1,368; engineers and conductors, $2,988; firemen, brakemen, switchmen, and hostlers, $2,441; occupations not elsewhere classified, $1,366.

It should be noted in connection with the foregoing that compensation data entering Retirement Board compilations exclude amounts in excess of $300 a month paid to any individual; for payroll taxes under the Carriers' Taxing Act are levied only on amounts less than $300.

Dr. William M. Leiserson, chairman of the National Railway Labor Panel, said on Wednesday evening that nothing had yet come to him in the way of a reply to his request for a determination by Economic Stabilization Director Byrnes with respect to the jurisdiction of the National War Labor Board in railway wage proceedings. Meanwhile Dr. Leiserson is still delaying action on the request of the non-operating unions for the appointment of an emergency board from the panel. At the same time there were reports to the effect that some Administration action on the jurisdictional question was imminent.

From the Railway Labor Executives' Association on February 2 came a complaint to the effect that railroad employees have been getting a Washington run-around until their union leaders are beginning to wonder if railroad men are in the war effort or not. The statement asserted that unless railroad employees "are promptly accorded treatment equal to the workers in war industries," they are apt "to take action to get into industries where they will be recognized as doing their part in winning the war."

Retirement Board Hires an Expert on Nudism

Maurice Parmelee, who has written "numerous volumes, all of them revolutionary in character," and one of them ("Nudism in Modern Life") advocating "the practice of universal nudism in office and factory," has been employed by the Railroad Retirement Board after having been dismissed by the Board of Economic Warfare, according to Representative Dies, Democrat of Texas and chairman of the committee investigating un-American activities. Mr. Dies in a February 1 House speech listed Mr. Parmelee among "crackpots and radical bureaucrats" whom he called upon Congress to purge from the government payroll.

The Texan called Mr. Parmelee a "very special case." He had, said the Congressman, been dismissed from a $5,600 a year BEW position "almost immediately after my exposure" of his activities, "which included several years spent in European nudist camps."

"The great bureaucratic family was, however, not to leave Parmelee jobless for long," Mr. Dies went on. "He is now employed as an economist by the Railroad Retirement Board at a salary of $4,600. Time and again, a similar thing has occurred—a bureaucrat exposed by one agency, and fired as a result of that exposure, has been picked up by another agency of the government. The contempt which these bureaucrats have for Congress which appropriates their salaries is unbounded."

Among the complaint's bill of particulars was the assertion that ever since the order creating the Office of Economic Stabilization was issued on October 3, the railroad unions "have been trying to get the procedure for applying that policy to the railroad industry clarified." Several government officials and agencies, the statement went on, "have been urging their pet views and claiming jurisdiction notwithstanding the President of the United States has stated several times just what he wants done."

The labor leaders wonder if "this pulling and hauling" is part of a "well laid plan" with a purpose "to subsidize other industries who are paying higher wages by taking money from the railroads so they will have a better claim to continue paying low wages." The latter followed a reference to the Office of Price Administration's current effort to have the Ex Parte 148 rate increases rescinded, a proceeding wherein action is expedited while at the same time the employees wage case is stalled." OPA, the statement claims, is among those who know that the railroads "have got the money to grant the employees' request"; yet it presses the rate-reduction demand.

"If they (railroad employees) are part of the war effort," the statement adds, "then stop the raid on rates and fares, clear the way and raise these low wages."

Other particulars of the complaint included the claim that some railroads have not yet granted the December, 1941, wage increases; and the "impairment" of the National Mediation Board which has been short-handed "for nearly two years," and now has "only one member." As noted elsewhere in this issue, this came about on February 1 with the retirement of David J. Lewis. Also, there are claims that weekly hours of work, overtime-pay arrangements, and hourly wages are more favorable in other industries.

New Officers for T. & T. Section

J. D. Rogers, assistant superintendent electric transmission and communication, of the New York, New Haven & Hartford, New Haven, Conn., has been selected as chairman of the Telegraph and Telephone section of the Operating-Transportation division of the A. A. R. for the two-year term ending December 31, 1944. T. P. Brewster, superintendent of telegraph, Atchison, Topeka & Santa Fe, Chicago, has been chosen to serve as vice-chairman of the section and W. A. Fairbanks will continue to serve as secretary.

Pullman Repair Shops Have No Accidents in 1942

The six repair shops of the Pullman Company located at Calumet, Ill.; St. Louis, Mo.; Buffalo, N. Y.; Atlanta, Ga.; Wilmington, Del.; and Richmond, Calif., completed 1942 with perfect accident records. These shops operated 7,114,806 man-hours without a chargeable accident and consequently with a zero frequency rate. In recognition of the efforts of the employees, the company made an award of $1,000 to the Good Will organization at each of the shops which represent all employee groups and care for needy employees.

Drugs and Cosmetics Industry to Conserve Transportation

Sub-committee progress reports on possible ways to economize on transportation facilities were presented this week at a Washington meeting of the War Production Board's Drugs and Cosmetics Transportation Industry Advisory Committee. The suggestions included those calling for scheduling of shipments to avoid congestion at loading facilities; elimination of excessive hauling by purchasing materials from the closest suppliers; and co-ordination of rail and truck services in the interest eliminating duplications of service.

Money for Mail Transport

An appropriation of $118,000,000 for railroad transportation of mail during the fiscal year ending June 30, 1944, is carried in the Treasury-Post Office appropriation bill (H. R. 1648) which was reported favorably from the House committee on appropriations this week. This would be a decrease of $8,000,000 below the $126,000,000 appropriation for the current fiscal year ending next June 30.

The committee report explained, however, that the estimates in connection with

the 1944 figure were made last fall when the volume of mail carried was running below anticipated figures. "Since that time," the report went on, "there has been a marked increase in volume, and an expected reduction in parcel-post business from mail order houses has not materialized. If present trends continue, the amount carried in the bill will not be sufficient to pay the cost of transportation of the mails by railroad. With postal business as uncertain as it now appears, it is not possible to gage accurately the requirements for this item."

Internal Revenue Bureau Issues Freight Tax Regulations

The Bureau of Internal Revenue has issued its regulations relating to the tax on amounts paid for the transportation of property which became effective December 1, 1942. The regulations were published in the Federal Register of February 3.

Up to this time the railroads have been guided in the matter by the pamphlet entitled "Suggested Basis for Insuring Uniformity by Railroads in the Application of the Tax on Transportation of Property," which was issued last November by the Finance, Accounting, Taxation and Valuation Department of the Association of American Railroads.

C. & N. W. Seeks to Enjoin I. C. C.

The Chicago & North Western, on January 28, asked the District Court at Chicago for an interlocutory injunction against the Interstate Commerce Commission so that the railroad may continue to handle freight between certain stations by means of local truck operators under contract. The I. C. C. refused to issue a certificate because the trucking is not done by the railway's employees but by an independent trucking company which has customers other than the North Western. The court has taken the case under advisement, allowing the claimants 20 days to file their briefs and has permitted the railroad to continue the service until April 1.

New England Coal Shipments

All-rail anthracite coal shipments into New England during the week ended January 23 totaled 2,199 cars or 109,950 tons, an increase of 515 cars or about 25,750 tons over the previous week, according to Solid Fuels Coordinator Ickes. Bituminous shipments, at 3,948 cars or 217,140 tons, were down 262 cars or 14,140 tons.

The latter was attributed to "continued bad weather"; while the increased anthracite shipments were made possible by "emergency action diverting the fuel from Canada and points in the United States west of Erie, Pa." Those restrictions, caused by the coal strike, were lifted by Mr. Ickes on February 1, although the announcement in that connection stated that the hard coal situation "remains extremely tight." Nevertheless, output under the six-day week is expected "to provide for an increase in the coal shipments to eastern states despite lifting of the restriction."

Meanwhile the Office of Defense Transportation on January 29 issued Suspension Order ODT 15, Revised-2, postponing from February 1 until March 1 its permit requirements with respect to the movement of coal from docks located north of and including the Hampton Roads, Va., area. "In effect," the ODT announcement said, "the postponement action is limited to the transportation of coal inland from docks along the coast of the New England states." It was issued "to allow shippers an opportunity to take voluntary action to achieve the same ends sought by the permit requirement, that is, the movement of every coal shipment by the method and route allowing the greatest utilization of facilities."

1942 Locomotive Shipments

Last year's shipments of railroad locomotives totaled 1,602, as compared with 970 in 1941 and 587 in 1940, according to reports made by builders other than railroad shops to the Department of Commerce's Bureau of the Census. The 1942 total included 715 steam locomotives, 22 electrics, 787 Diesel-electrics, and 78 of other types, as compared with 1941 shipments of 182 steam locomotives, 18 electrics, 712 Diesel-electrics, and 58 of other types.

December shipments totaled 146 locomotives, as compared with a revised figure of 124 for November, and 96 in December, 1941. On December 31 the builders had unfilled orders for 1,967 locomotives, including 1,139 steam, 43 electrics, 781 Diesel-electrics, and four of other types. At the close of 1941 the unfilled order totaled 1,210 locomotives, including 526 steam, 49 electrics, 584 Diesel-electrics, and 51 of other types.

Data supplied by the Car Service Division, Association of American Railroads on locomotive building in railroad shops show that 82 locomotives, including 64

Selected Income and Balance-Sheet Items of Class I Steam Railways

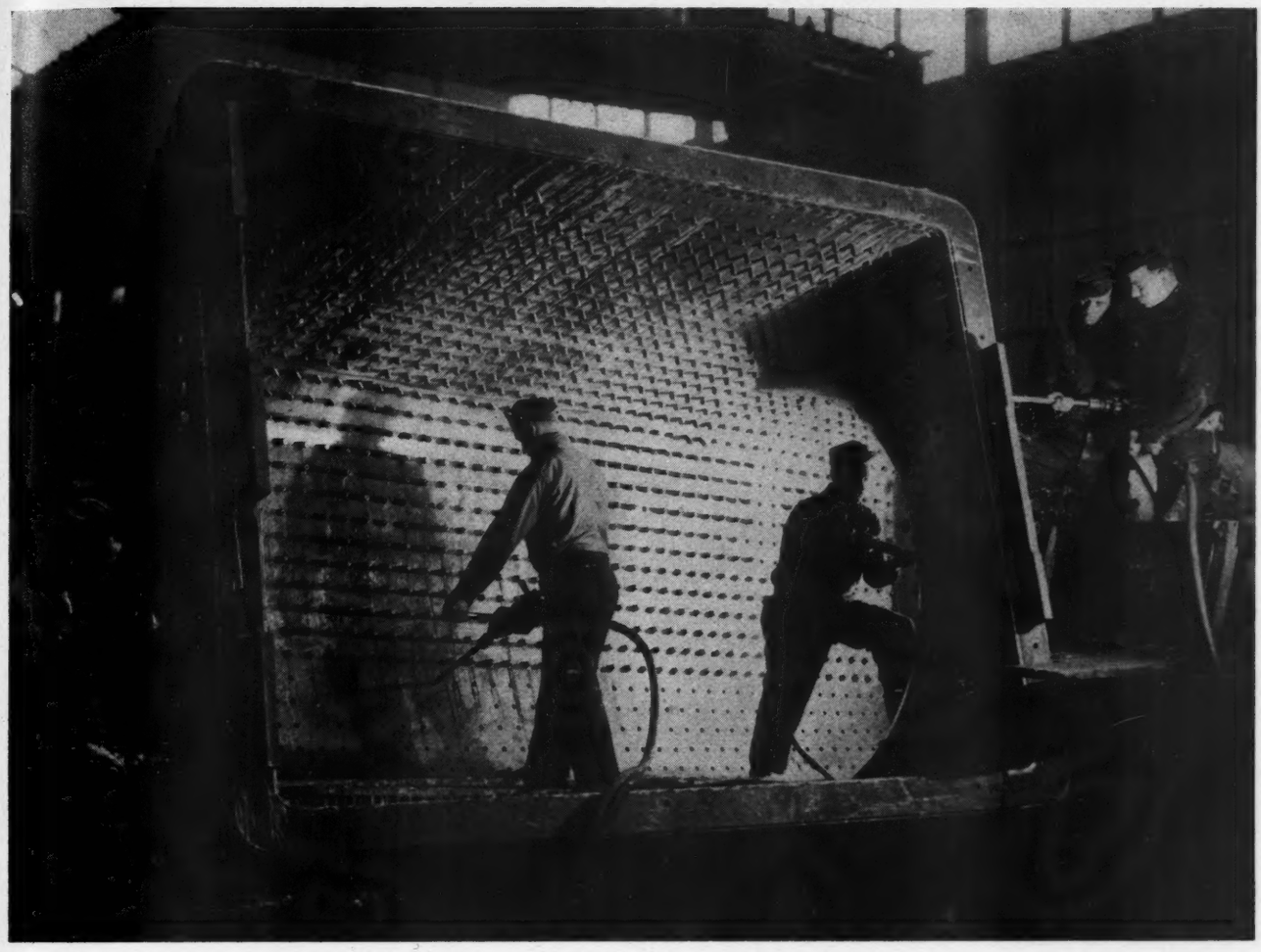
Compiled from 132 reports (Form IBS) representing 136 steam railways
(Switching and Terminal Companies Not Included)

Income Items	All Class I Railways — For the month of November 1942	For the month of November 1941	For the eleven months of 1942	For the eleven months of 1941
1. Net railway operating income	$148,949,000	$68,933,015	$1,309,041,877	$918,954,295
2. Other income	17,591,303	13,631,186	142,472,503	137,789,962
3. Total income	166,540,303	82,564,201	1,451,514,380	1,056,744,257
4. Miscellaneous deductions from income	5,193,787	2,126,620	33,920,973	25,318,226
5. Income available for fixed charges	161,346,516	80,437,581	1,417,593,407	1,031,426,031
6. Fixed charges:				
6-01. Rent for leased roads and equipment	10,708,579	11,079,908	163,790,629	141,290,155
6-02. Interest deductions[1]	36,927,031	38,291,661	406,405,662	425,105,137
6-03. Other deductions	118,538	121,135	1,301,204	1,308,030
6-04. Total fixed charges	47,754,148	49,492,704	571,497,495	567,703,322
7. Income after fixed charges	113,592,368	30,944,877	846,095,912	463,722,709
8. Contingent charges	2,282,845	1,557,803	25,383,884	17,009,432
9. Net income	111,309,523	29,387,074	820,712,028	446,713,277
10. Depreciation (Way and structures and Equipment)	21,081,585	17,980,730	228,342,391	197,707,490
11. Amortization of defense projects				
12. Federal income taxes	11,020,840	1,861,862	76,731,762	4,172,420
13. Dividend appropriations:	78,814,220	8,343,898	713,080,683	168,156,938
13-01. On common stock	34,016,015	51,533,759	135,910,684	134,986,391
13-02. On preferred stock	3,493,575	4,465,167	29,267,319	24,146,239
Ratio of income to fixed charges (Item 5÷6-04)	3.38	1.63	2.48	1.82

Selected Asset and Liability Items	All Class I Railways — Balance at end of November 1942	Balance at end of November 1941
20. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	$522,091,189	$536,307,905
21. Cash	$1,120,469,559	$892,360,703
22. Temporary cash investments	693,537,086	141,619,576
23. Special deposits	157,172,966	229,499,435
24. Loans and bills receivable	989,142	1,142,676
25. Traffic and car-service balances—Dr.	39,736,605	31,466,230
26. Net balance receivable from agents and conductors	158,171,562	77,955,776
27. Miscellaneous accounts receivable	412,679,174	177,078,761
28. Materials and supplies	508,775,912	437,309,795
29. Interest and dividends receivable	30,691,004	28,755,337
30. Rents receivable	1,623,507	1,547,600
31. Other currents assets	15,615,833	10,409,846
32. Total current assets (items 21 to 31)	$3,139,462,350	$2,029,145,735
40. Funded debt maturing within 6 months[2]	$150,501,187	$126,458,721
41. Loans and bills payable[3]	$31,687,951	$57,702,024
42. Traffic and car-service balances—Cr.	130,740,312	61,540,579
43. Audited accounts and wages payable	387,518,659	315,819,130
44. Miscellaneous accounts payable	71,894,557	45,612,799
45. Interest matured unpaid	44,061,234	32,989,693
46. Dividends matured unpaid	9,618,596	4,510,307
47. Unmatured interest accrued	88,480,410	86,935,949
48. Unmatured dividends declared	70,223,496	52,607,675
49. Unmatured rents accrued	31,110,461	30,596,538
50. Accrued tax liability	942,873,647	348,345,417
51. Other current liabilities	62,901,932	44,071,918
52. Total current liabilities (items 41 to 51)	$1,871,111,255	$1,080,732,029
53. Analysis of accrued tax liability:		
53-01. U. S. Government taxes	816,494,963	224,884,387
53-02. Other than U. S. Government taxes	126,378,684	123,461,030

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other than long-term debt in default) which will become due within six months after close of month of report.
[3] Includes obligations which mature not more than 2 years after date of issue.

News Department continued on next left-hand page



At Lima particular attention is paid to the application of stayholts. This care in every phase of construction has an important bearing on future locomotive maintenance.

Locomotives Have A Bigger Job In 1943!

1943 will be a critical year for American railroads. In the words of Mr. Joseph B. Eastman, "... Looking ahead into 1943 ... the remarkable transportation achievements of the past year must be excelled and the job will be performed with increasing difficulty. Performed it will be, however, because it must."

Transportation's increased responsibility in 1943 rests in large part upon motive power ... locomotives that can be relied upon to provide increased gross-ton-miles per train hour—a problem requiring long-lived dependable power.

Dependability has been built into the Lima locomotives now serving many American Railroads ... all the dependability that can be gained from modern manufacturing methods, skilled craftsmanship and an experience stretching over three quarters of a century.

LIMA LOCOMOTIVE WORKS LIMA LOCOMOTIVE WORKS INCORPORATED **INCORPORATED, LIMA, OHIO**

Net Income of Large Steam Railways

(Switching and Terminal Companies Not Included)

Name of Railway	Net Income After Depreciation and Amortization of Defense Projects — For the Eleven Months of 1942	1941	Net Income Before Depreciation and Amortization of Defense Projects — For the Eleven Months of 1942	1941
Alton†	$1,143,945	$83,819	$1,404,629	$336,726
Atchison, Topeka & Santa Fe[1]	64,305,321	25,235,202	78,567,966	36,551,954
Atlantic Coast Line	17,704,383	9,044,758	22,353,752	11,229,071
Baltimore & Ohio	31,972,287	19,601,188	41,996,192	26,582,183
Boston & Maine	8,344,546	5,894,064	10,190,431	7,203,192
Central of Georgia†	3,449,212	1,099,861	4,612,152	1,900,008
Central of New Jersey†	4,306,483	582,491	5,879,500	1,791,065
Chesapeake & Ohio	27,751,115	39,092,546	38,003,207	47,121,580
Chicago & Eastern Illinois	2,261,029	1,290,210	2,847,841	1,856,784
Chicago & North Western†	9,190,324	1,810,826	17,530,135	6,301,683
Chicago, Burlington & Quincy	24,455,046	9,612,112	30,945,107	14,455,046
Chicago Great Western	2,118,318	1,634,914	2,946,979	2,153,616
Chicago, Milwaukee, St. Paul & Pacific†	10,355,321	5,565,987	19,759,701	11,129,254
Chicago, Rock Island & Pacific†	20,427,280	4,368,225	25,050,079	8,368,400
Chicago, St. Paul, Minneapolis & Omaha	691,155	* 748,744	1,391,894	* 257,156
Delaware & Hudson	5,240,893	4,165,507	7,225,160	5,214,393
Delaware, Lackawanna & Western	4,432,040	3,218,534	8,427,141	5,484,838
Denver & Rio Grande Western†	10,771,042	* 2,571,705	12,713,124	* 1,343,242
Duluth, Missabe & Iron Range	7,189,288	15,285,654	8,568,347	16,099,028
Elgin, Joliet & Eastern	1,957,469	4,707,037	5,624,145	5,698,876
Erie	13,562,125	7,637,978	19,814,841	11,061,224
Grand Trunk Western	1,214,131	1,724,842	2,489,956	2,804,263
Great Northern	26,205,121	14,502,065	34,133,885	20,529,075
Gulf, Mobile & Ohio	3,551,413	2,065,347	4,608,212	2,844,924
Illinois Central	11,440,415	6,323,664	19,191,807	12,529,647
Lehigh Valley	5,359,013	3,178,680	9,370,081	5,191,267
Long Island	* 178,550	* 1,111,173	1,738,109	331,650
Louisville & Nashville	15,652,193	16,460,794	22,654,347	20,572,353
Minneapolis, St. Paul & Sault Ste. Marie†	* 2,507,101	* 3,123,159	* 484,999	* 1,946,006
Missouri-Kansas-Texas	5,014,373	* 878,656	6,063,793	163,565
Missouri Pacific†	27,442,539	3,070,429	32,321,502	7,216,914
New York Central[2]	42,797,495	24,335,174	73,382,775	41,043,941
New York, Chicago & St. Louis	8,591,480	10,613,194	11,079,600	12,168,378
New York, New Haven & Hartford†	17,659,386	4,668,370	21,757,675	7,741,207
Norfolk & Western	20,030,041	25,763,925	31,728,296	31,840,672
Northern Pacific	12,532,883	5,927,970	21,336,429	10,112,849
Pennsylvania	89,569,578	47,297,132	121,377,887	73,731,572
Pere Marquette	3,051,841	3,099,537	5,862,158	5,278,416
Pittsburgh & Lake Erie	3,966,253	5,199,868	6,884,583	7,324,973
Reading	13,682,048	8,639,682	18,451,853	11,580,498
St. Louis-San Francisco†	11,238,664	131,298	14,166,490	2,889,314
St. Louis, San Francisco & Texas	939,497	135,173	939,497	135,173
St. Louis Southwestern	5,260,704	3,321,925	6,004,136	3,935,885
Seaboard Air Line‡	18,470,776	594,503	21,864,824	2,849,602
Southern	25,890,673	16,227,826	34,794,729	20,195,204
Southern Pacific Transportation[3]	68,798,336	33,995,901	85,714,572	41,486,397
Texas & Pacific	7,798,201	3,009,790	9,021,006	4,175,697
Union Pacific R. R. (including leased lines)	50,651,162	21,871,132	60,944,452	29,625,160
Wabash	5,424,277	2,797,482	8,441,043	4,788,286
Yazoo & Mississippi Valley	10,314,796	2,422,726	10,836,091	2,936,185

‡ Report of receiver or receivers.
† Report of trustee or trustees.
[1] Includes Atchison, Topeka & Santa Fe Ry., Gulf, Colorado & Santa Fe Ry., and Panhandle & Santa Fe Ry.
[2] Includes Boston & Albany, lessor to New York Central R. R.
[3] Includes Southern Pacific Company, Texas & New Orleans R. R., and leased lines. The report contains the following information: "Figures reported for Southern Pacific Transportation System exclude offsetting debits and credits for interest on funded securities and rentals for leased properties between companies included therein. Operations for 1942 of separately operated Solely Controlled Affiliated Companies (excluding results for Southern Pacific Railroad Company of Mexico), not included in income results for the System, resulted in a net income of $446,532 for the month and $2,186,496 for the period. These results include $195,553 for the month and $2,153,357 for the period representing interest on bonds of such companies owned by Southern Pacific Company not taken into income by S. P. Co. and therefore, not included in the 1942 income results for the System. The combined results for 1942 for Southern Pacific Transportation System and separately operated Solely Controlled Affiliated Companies (excluding S. P. R. R. Co. of Mexico) amounted to a net income of $10,097,575 for the month and $73,138,189 for the period. Figures herein given exclude results of S. P. R. R. Co. of Mexico for the reason that policy was adopted January 1, 1940 of making no further advances to that company, it being required to conduct its operations entirely within its own resources."
* Deficit.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

steam and 18 electrics, were thus produced in 1942, as compared with a 1941 total of 24 locomotives, including 20 steam and four electrics. In December, 1942, railroad shops produced 14 locomotives (all steam), as compared with six (four steam and two electrics) in December, 1941. On January 1 railroad shops had unfilled orders for 105 locomotives, including 92 steam and 13 electrics.

Equipment Installed in 1942

Class I railroads put 63,009 new freight cars and 712 new locomotives in service in 1942, according to the Association of American Railroads. This was the smallest number of new cars to be installed since 1939 but the greatest number of locomotives since 1930. It compares with the 80,502 new freight cars and 633 new locomotives put in service in 1941.

Of the new freight cars installed last year, there were 34,713 box, 23,144 coal, 2,938 flat, 631 refrigerator, 100 stock and 1,483 miscellaneous cars. The new locomotives installed included 308 steam and 404 electric and Diesel-electric compared with 161 steam and 472 electric and Diesel-electric in 1941.

Class I railroads on January 1, had 27,061 new freight cars on order, compared with 74,897 cars on the same date one year ago. The former figure included 7,301 box, 17,946 coal, 1,444 flat, 200 stock and 170 miscellaneous cars. New locomotives on order on January 1, totaled 888, which included 355 steam and 533 electric and Diesel-electric. On January 1, 1942, there were 546 on order, of which 258 were steam and 288 were electric and Diesel-electric.

New "Post War" Terminal Proposed for New York

John Howes Burton, president of Burton Brothers, cotton converters, large land owner on New York's Fifth avenue and east side, and the man who was largely responsible, many years ago, for the transfer of the garment trade from Fifth avenue to Seventh avenue and the west side of New York, a move which protected the large department store developments on Fifth avenue, before a large gathering of newspaper representatives on February 3, proposed the building of a new terminal station on Fourth avenue between 33rd and 34th streets, New York. The proposal was put forth as a post-war project, to be financed largely by the government, which would promote development of Long Island's large ocean frontage and the business and industrial development and improvement of Long Island and the east side of New York. Under the proposal, the new station would be a terminus for the Long Island Railroad.

Elkins Act Violation Brings $8,000 Fine

The Interstate Commerce Commission has been advised that a fine of $8,000 was imposed January 25 on Guy A. Thompson as trustee of the Houston & Brazos Valley upon a plea of guilty to an eight-count information filed in the United States District Court for the Southern District of Texas.

The information, according to a notice from I. C. C. Secretary W. P. Bartel, "charged the willful failure on the part of the carrier strictly to observe his tariffs in violation of section 1 of the Elkins Act on shipments of refined sulphur transported from Freeport, Texas, to New Orleans, La., for export, in cars having a weight carrying capacity of 80,000 lb., on which the transportation charges were assessed and collected by the carrier on the basis of the actual weights of the shipments, instead of on the basis of an 80,000 lb. carload minimum provided for by tariff."

Pacific Coast to Be Deprived of Its Budweiser

In one of the first major moves toward a voluntary reduction of cross-hauling, Anheuser Busch, Inc., St. Louis, Mo., has abandoned its West Coast beer markets, effective February 1. The curtailment of shipping, arranged after conferences with the Beverages and Tobacco division of the War Production Board, is expected to be the first of a series of similar cross and long-haul eliminations within the brewing industry.

In a telegram to WPB, Adolphus Busch, II, said: "As a national shipping brewery with valuable markets in California, Washington and Oregon which we have been

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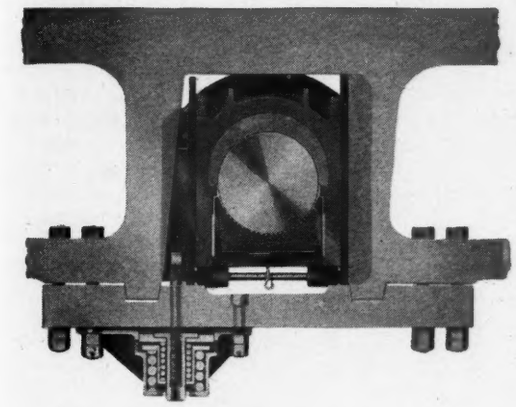

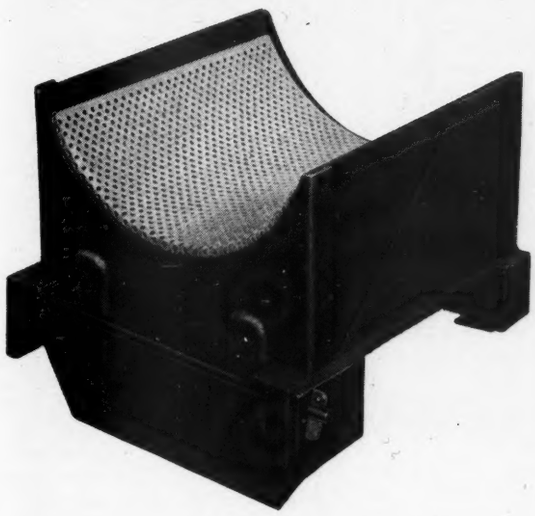

PROTECT BEARINGS

Save vital materials

and Prolong Mileage between Shoppings

EVERY LOCOMOTIVE is needed on the road. Time out for maintenance must be kept to a minimum. » » Helping to keep power in service are two Franklin devices that protect driving box bearings — The Automatic Compensator and Snubber and the Driving Box Lubricator. » » The first prevents slack from accumulating by automatically compensating for normal wear and temperature changes. » » The Driving Box Lubricator insures constant lubrication. The latest No. 8 design makes re-packing easier. It weighs much less and has a spreader to hold box parallel.

FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK CHICAGO

In Canada: FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL

supplying for over 50 years, and with a full realization of the hardships we know it will work on our customers and many friends in these states, it is my pleasure to advise that in line with the urgency of the WPB program to expedite speedier delivery of all government business to this important section of the country, we shall, effective February 1, discontinue all beer shipments during the present critical emergency to these three valuable markets, thereby reducing our total car mileage in 1943, based on our experience last year, by over 14 per cent and entirely eliminating our own truck mileage in these states."

October Bus Revenues 86.1 Per Cent Above October, 1941

Class I motor carriers of passengers reported October, 1942, revenues of $25,655,504 as compared with $13,788,826 in October, 1941, an increase of 86.1 per cent, according to the latest monthly compilation prepared by the Interstate Commerce Commissions Bureau of Transport Economics and Statistics from 147 reports representing 152 bus operators. Passengers carried were up 89.2 per cent, from 19,096,775 to 36,123,525.

	Passenger revenue		Passengers carried	
	October 1942	October 1941	October 1942	October 1941
New England Region	$1,326,110	$604,298	$3,484,080	$1,543,490
Middle Atlantic Region	2,730,461	1,573,162	5,487,772	3,177,329
Central Region	3,517,390	2,209,253	5,905,430	3,432,270
Southern Region	6,935,352	3,651,992	8,975,096	4,782,508
Northwestern Region	676,378	445,206	552,834	355,946
Mid Western Region	2,280,039	1,216,722	1,798,482	867,139
Southwestern Region	4,354,362	2,091,774	5,496,672	2,473,451
Rocky Mountain Region	315,085	134,121	202,060	90,967
Pacific Region	3,520,327	1,862,298	4,221,099	2,373,675

The breakdown by regions of the bus revenue and traffic figures, which exclude data on charter or special party service, is given in the accompanying table.

Supreme Court Upholds I. C. C. in Dual Motor Operations Case

The United States Supreme Court this week sustained an Interstate Commerce Commission order denying a contract-carrier permit to an affiliate of a certificated common carrier on the ground that the dual operations would not be "consistent with the public interest and the national transportation policy" in view of the fact that the two trucking companies were "owned, controlled, and managed in a common interest." The decision by Justice Reed was in Ziffrin Incorporated, Appellant, vs. The United States of America and Interstate Commerce Commission, the case coming to the Supreme Court on appeal from a three judge statutory court's refusal to enjoin the commission's order.

The commission's power to refuse authority for dual operations is based on section 210 of the Interstate Commerce Act, which during the pendency of the Ziffrin application was amended by the Transportation Act of 1940 to give the commission specific authority to refuse to sanction dual operations of companies under common control as well as those of an individual company.

Ziffrin contended that it had not had an opportunity after the amendment to show the absence of common control between it and the certificated common carrier involved—Ziffrin Truck Lines, Inc. The court ruled that the evidence considered by the commission was ample to support its conclusions and to sustain the order on judicial review.

All-Expense Bus Tours Are Held Special Operations

In a decision by Division 5, the Interstate Commerce Commission has upheld the authority of Hunter Clarkson, Inc., to conduct special highway vehicle operations on sightseeing or pleasure tours from Carlsbad, N. M., to Carlsbad Caverns National Park to accommodate passengers on trains of the Atchison, Topeka & Santa Fe.

The decision resulted from a complaint by Dale Resler, doing business as Carlsbad Cavern Coaches, holder of authority for common carrier bus operations between the points mentioned, among others, who contended that Clarkson was in fact engaged in a common carrier operation because daily service on a regular schedule and route was advertised and performed.

Reviewing the circumstances of the case, the commission ruled that operations of the type provided can be frequent and regular and still be special operations such as Clarkson was authorized by a "grandfather" clause certificate to conduct in several states in connection with Santa Fe rail services. The distinguishing characteristic, the commission points out, is that the operations are provided specially for sightseers or persons desiring pleasure tours, who pay "all-expense" fares embracing not only the cost of round-trip transportation, but also meals and entrance fees, while regular common carrier service is not performed or offered.

Labor Unions No Longer Run Mexico's Railways

A decree issued by Avila Camacho, president of Mexico, on December 31, has abolished the administration composed of railway labor union representatives, which has operated the National Railways of Mexico, and at the same time has created a new board of administration. The new board consists of four government and three union representatives. One government representative is appointed by the Treasury and Finance department, who acts as chairman of the new board. The other three government representatives include two appointed by the Departments of Communication and Labor and the general manager of the railways.

The present members of the board are as follows: Chairman, Ramon Beteta, under-secretary of the Treasury and Finance department; vice-chairman, Margarito Ramirez, general manager of the railway; and other members, Manuel R. Palacios, under-secretary of the Labor department, and Pedro Martinez Tornel, director of the Division of Railways of the Communications department.

Under the new set-up, which became effective on January 15, the general accountant, the treasurer, the personnel chief and the purchasing agent report direct to the general manager. At the same time two under or assistant general managers have been appointed with jurisdiction over certain departments. One, J. J. Franco, has jurisdiction over the transportation, maintenance of way, motive power and car service departments and auditors, special cars, instruction, tests and analysis. The other, Pablo Hernandez, has charge of the traffic, express, medical, statistical, police and legal departments.

Coincident with the creation of the new administration, Santos Fierro has been appointed general superintendent of motive power and machinery and Juan C. Garcia has been appointed general superintendent of transportation.

Long Island Plans New Ticket to Aid Commuters

Under a new plan to be put into effect by the Long Island on February 15, commuters may begin using their monthly tickets on any day of the month. All 60-trip monthly and 46-trip school commutation tickets will be good for use during any one continuous monthly period, instead of being limited to the calendar month. The new type of ticket may be purchased for use on any day of the month and will be good up to the same date of the following month. Special permission has been granted by the Public Service and Transit Commissions to make this change effective on less than the customary 30-day notice.

It is believed that the new type of ticket will relieve congestion at ticket offices around the last and first days of each month and that elimination of the calendar-month limits, together with the intervention of holidays, weekends and vacations, will mean substantial savings for many commuters. When a ticket expires, just prior to a weekend, a holiday or a vacation period—or even during a period of illness—there will be no need to buy a new ticket until it is time to start commuting again. In order to provide ample time for purchase, the new tickets will be sold three days in advance of the date on which the first trip is to be made.

Civil Service Seeking Transportation Men

Traffic and transportation specialists are now being sought by the Civil Service Commission for federal employment throughout the U. S. These specialists will plan, direct, and supervise traffic and transportation programs in such agencies as the ODT, the War department, the Maritime Commission, the Board of Investigation and Research and the War Relocation Authority. Salaries range from $2,600 to $6,500 a year. Applicants must have had

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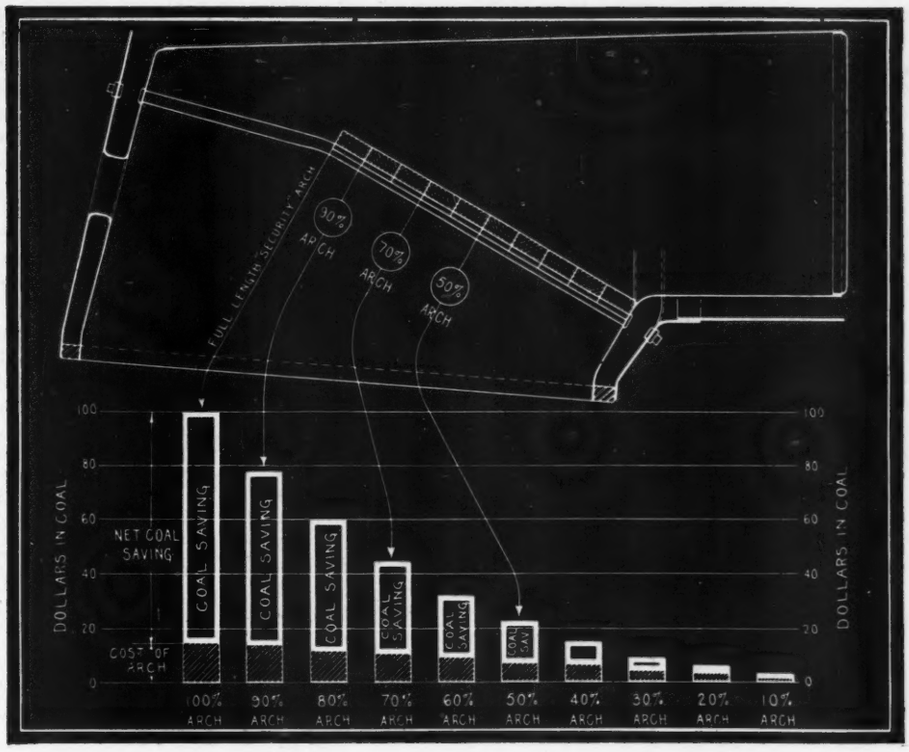

THE EFFECT OF ABBREVIATED ARCHES ON FUEL SAVING

FUEL CONSERVATION... a wartime need!

Fuel wastage is a two-fold loss; the fuel itself and the transportation necessary to haul it. Because of the strategic importance of fuel to the war program every effort must be made to conserve this vital material.

The fuel economy of Security Sectional Arches has been thoroughly proved in over 32 years of service on American railroads. But only a *complete* Arch can produce maximum fuel savings.

You need a full Arch for full fuel economy.

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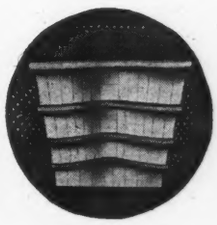

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some experience in traffic or transportation and must demonstrate ability to handle difficult technical assignments. Three years of qualifying experience is required for the $2,600 grade, with corresponding additional experience for each successive grade above $2,600.

Persons are particularly needed with experience in such activities as rate construction or analysis, cost studies, maintenance of equipment or maintenance of way, appraisal or valuation, terminal or port management, inspection or investigation work, warehousing, ship stowage, packaging and crating, stevedoring, freight forwarding, exporting and importing.

Applications and complete information regarding the above may be obtained at first and second-class post offices and from the U. S. Civil Service Commission in Washington, D. C.

December Truck Freight 22.9 Per Cent Over 1941

The volume of freight transported by motor carriers in December showed an increase of 0.8 per cent over November and an increase of 22.9 per cent over December, 1941, according to American Trucking Associations.

Comparable reports were received by A. T. A. from 137 motor carriers in 35 states. The reporting carriers transported an aggregate of 1,142,738 tons in December, as against 1,133,234 tons in November, and 929,731 tons in December, 1941. The A. T. A. index figure, based on the average 1938-1940 monthly tonnage of the reporting carriers, was 184.84.

Almost 80 per cent of all tonnage transported in the month was reported by carriers of general freight. The volume in this category increased 1.7 per cent over November and 20.7 per cent over December, 1941. Transporters of petroleum products, accounting for slightly less than 14½ per cent of the total, showed a decrease of 7.2 per cent under November, but held 44.9 per cent over December, 1941. Iron and steel products, approximately 1½ per cent of the total tonnage, increased 6.2 per cent over November, but dropped 14.7 per cent under December, 1941. A little more than 5 per cent of the total tonnage reported was miscellaneous commodities, including tobacco, milk, textile products, coke, bricks, building materials, cement and household goods. These showed an increase of 10.8 per cent over November, and 20.8 per cent over December of last year.

Transport Club for Canadian and U. S. Officers Opened in Britain

The Transportation Club, located at Wilton Crescent, London, S. W. 1, England, designed for American and Canadian officers now in England who in peacetime were employed by transportation companies, was opened on January 1 by Sir Ronald Matthews, chairman of the Railway Companies' Association. The club is sponsored by the four British railways and the London Passenger Transport Board and is to be run as a social club, with Lt. Colonel K. R. N. Speir, D. S. O., as its secretary. W. Averell Harriman, chairman of the board of the Union Pacific and special assistant to the President of the U. S., and Lt.-Colonel Unwin Simson, administrative secretary, representing the High Commissioner for Canada, participated in the ceremonies.

In his address at the opening ceremony, as reported in the Railway Gazette, London, Sir Ronald Matthews said that during peacetime it had been the practice of the British railways and the London Passenger Transport Board to send men to the United States and Canada to study railway practices. He said that these visiting railroaders had been most hospitably received on the North American continent and that the British railways and the Transport Board now welcomed the opportunity to return in some degree the kind treatment extended to their representatives by establishing a center for American and Canadian transportation officers where they could meet their British colleagues.

Mr. Harriman expressed the belief that while operating problems in the transportation industry in Canada and the U. S. and in Great Britain varied greatly, they all had the same standards of public service and he believed the club would be an important contribution in forging new bonds of interest between the countries and in dealing with problems of the future. Colonel Simson said he was sure the many friendships which would be made and renewed at the club would result in increased co-operation after the war.

Furniture for the club was supplied by the hotels of the British railways and catering is in the hands of a committee under the direction of R. A. P. Setterfield, manager of hotels and dining cars of the Great Western. The usual catering facilities (including some American specialties), library, and writing rooms are available. The work of decorating and equipping the club was carried out entirely by the railway companies' personnel under the leadership of Miss P. M. Oxenford, assistant to the controller of the London, Midland & Scottish Railway Hotels.

Transport Board's Rate Report Delayed

The report on the interterritorial freight rate structure which the Transportation Board of Investigation and Research had planned to issue last month has been delayed, but will be issued "not later than April 1," Chairman Nelson Lee Smith announced on February 1. Mr. Smith also advised Congress of the delay in a letter which was noted in the Congressional Record of the same date.

This rate study is outside the specific assignments which the Board got in the Transportation Act of 1940. It was undertaken early last year in accordance with a commitment made to Senator McKellar, Democrat of Tennessee, who in his role as chairman of a Senate appropriations sub-committee had threatened to vote against a pending appropriation for the Board unless he got the definite promise that the rate study would be made. Dr. D. Philip Locklin of the University of Illinois is director of the study.

Freight Car Loading

Loadings of revenue freight for the week ended January 30 totaled 734,582 cars, the Association of American Railroads announced on February 4. This was an increase of 31,004 cars, or 4.4 per cent, above the preceding week, a decrease of 80,983 cars, or 9.9 per cent, below the corresponding week last year, and an increase of 20,228 cars, or 2.8 per cent, above the comparable 1941 week.

As reported in last week's issue, loadings of revenue freight for the week ended January 23 totaled 703,578 cars, and the summary for that week, compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loadings

For the Week Ended Saturday, January 23

District	1943	1942	1941
Eastern	140,735	174,202	158,955
Allegheny	155,947	178,106	157,415
Pocahontas ...	52,395	50,961	47,847
Southern	119,387	129,061	110,864
Northwestern ..	66,969	98,261	81,027
Central Western	102,730	124,408	101,833
Southwestern ..	65,415	63,082	52,811
Total Western Districts	235,114	285,751	235,671
Total All Roads	703,578	818,081	710,752
Commodities			
Grain and grain products	45,220	47,201	30,772
Live stock.....	11,466	12,341	10,940
Coal	164,027	162,770	154,533
Coke ....'....	15,136	14,212	13,614
Forest products	33,669	47,365	39,008
Ore	13,559	14,103	12,431
Merchandise l.c.l.	84,487	149,487	149,862
Miscellaneous ..	336,014	370,602	299,592
January 23....	703,578	818,081	710,752
January 16....	755,369	811,327	703,497
January 9....	716,272	736,972	711,635
January 2....	621,048	676,534	614,171
December 26...	591,595	606,502	545,307
Cumulative Total, 4 Weeks....	2,796,267	3,042,914	2,740,055

In Canada.—Carloadings for the week ended January 23 totaled 50,168, as compared with 61,774 for the previous week and 64,992 for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

Total for Canada:	Total Cars Loaded	Total cars Rec'd from Connections
January 23, 1943.....	50,168	30,107
January 16, 1943.....	61,774	34,341
January 9, 1943.....	57,732	31,715
January 24, 1942.....	64,992	34,090
Cumulative Totals for Canada:		
January 23, 1943.....	215,441	125,788
January 24, 1942.....	234,235	116,285
January 25, 1941.....	198,248	105,327

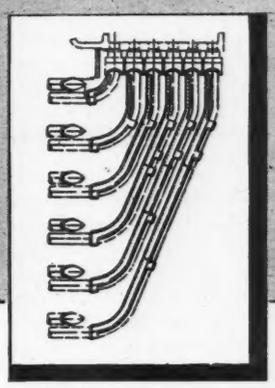
Scott Warns Truckers to Reduce Mileage or Take Orders

The Office of Defense Transportation has "backed away" from the task of "routing and dispatching" truck traffic, "confidently believing that the carriers could do a better job themselves," said Jack Garrett Scott, ODT general counsel, in an address January 29 to the Colorado Motor Carriers Association at Denver, Colo.—"but our faith in this hope is wavering."

"Real and imminent" dangers that concern the civilian economy on which the

News Department continued on next left-hand page

Shields Save Superheater Tubing



Application of Elesco shields to type "A" superheater units

Elesco shields extend the life of locomotive superheater units by protecting them from the abrasive action of cinders.

Superheater unit shields are an Elesco development . . . and the name ELESCO is on each shield — use them.

A-1561

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whole war effort is based, and in that way the outcome of the war itself, threaten the future of the motor carrier industry, Mr. Scott said, pointing out competitive practices that the industry may expect to be required to discontinue if voluntary action to that end is not taken.

Joint action between truck operators, the speaker suggested, holds the greatest hope for mileage saving and conservation measures necessary under the prevailing conditions, but he expressed himself as "greatly disappointed at the very small number of such plans" proposed to the ODT. Joint information offices, set up in connection with ODT maximum load requirements, "have been noticeably bypassed and ignored," he added.

Mr. Scott also told his audience that the ODT has "found a tendency in many parts of the country for common carriers who find themselves with more traffic than they can haul to be very choosy about what they carry. Rather than report surpluses to joint information offices or to other carriers, they select the most profitable shipments, and permit the shippers of the less desirable traffic to wait and whistle."

The ODT counsel referred to the "rumors" that his office plans an "arbitrary mileage restriction on inter-city motor transportation," and told how surveys and discussions of this situation have been under way without definite decisions. "If there is to be any limitation of the length of motor hauls," he said, "it will be only after the most careful survey."

Chicago-West Coast Passenger Train Schedules Lengthened

In order to expedite the handling of war traffic, a number of West Coast passenger train schedules will be lengthened on February 14 and 15. Practically all passenger trains, excluding streamliners, operated by the Chicago & North Western, the Union Pacific and the Southern Pacific between Chicago and the Pacific Coast will go on schedules that will be lengthened as much as seven hours, effective February 15. The trains include the Pacific Limited, the San Francisco Overland Limited and the San Francisco Challenger operated between Chicago and San Francisco over the C. & W.—U. P.—S. P.; the Los Angeles Limited and the Los Angeles Challenger, operated between Chicago and Los Angeles over the C. & N. W.—U. P.; and the Portland Rose, operated between Chicago and Portland, Ore. over the C. & N. W.—U. P. The schedules are now 60½ hr., 61⅛ hr., 60½ hr., 60¾ hr., 60⅝ hr., and 65⅛ hr. respectively, and some will be lengthened ½ hr., others 4 and 5 hr. and one 7 hr.

According to F. G. Fitz-Patrick, chief traffic officer of the North Western, the desire of the three lines to give primary attention to essential war freight is the reason for lengthening the schedules. He explained that under the new arrangement the transcontinental trains will have a better opportunity to operate on an "on time" basis.

The Exposition Flyer operated between Chicago and San Francisco over the Chicago, Burlington & Quincy, the Denver & Rio Grande Western and the Western Pacific, will have its schedule lengthened 2¾ hr. westbound and 3 hr. eastbound between Denver, Col., and San Francisco, effective February 14 and 15. The train will leave Chicago at 12:35 p.m. and will arrive in Denver at 8:20 a.m. the next morning as at present. It will leave Denver at 2 p.m. instead of 3:45 p.m. and will arrive in San Francisco at 8:20 a.m. instead of 7:50 a.m. the third morning. Returning it will leave San Francisco at 5 p.m. instead of 6 p.m. and will arrive in Denver at 12:50 p.m. the third afternoon instead of 10:50 a.m. It will arrive in Chicago at 11:55 a.m. as at present.

Closing Argument Presented in Pullman Anti-Trust Suit

Thurman Arnold, Assistant Attorney General, in the closing argument for the federal government in its anti-trust suit against the Pullman company presented before the Third Circuit Court of Appeals in Philadelphia on February 1, charged that that company had obtained a "corner in every single angle" of the field. His allegations were denied by counsel for the defendants. Mr. Arnold, in charge of the anti-trust division of the Department of Justice, was one of a battery of attorneys for and against the charge of monopoly against Pullman. Attorneys for the defendants were Ralph M. Shaw of Chicago, former U. S. Senator George Wharton Pepper of Philadelphia, and Seth W. Richardson of Washington. Direct testimony in the anti-trust suit, started by the government against the Pullman Company in 1940, was completed on July 1, 1942, and was reported currently in *Railway Age*.

Mr. Arnold charged that Pullman interests had obtained their power from the activities of George Pullman when he began buying up competitors 40 years ago, after he had invented the sleeping car. He went on to explain that the suit against Pullman was part of a general program to free transportation of the future so that it would be in a position to meet competition. He asserted that neither the Pullman company nor the railroads of the country would do anything to meet this competition unless forced to do so and that a ruling in favor of the government would force them to make plans for such competition.

In answering this charge, Mr. Richardson said that "if George Pullman hadn't made a unified sleeping car service for the whole country, somebody else would have." He told the court that a sleeping car company couldn't turn a wheel "unless another corporation (a railroad) says the word," and that "the Pullman company is wholly dependent upon the railroads for existence."

Mr. Shaw attributed George Pullman's success in buying up his competitors in the last century to "excellence of performance —not coercive power" and went on to say that "everyone has the right to contract with a railroad to perform sleeping car service. But no one has been willing to risk the capital for more than 40 years. When the suit was filed, 22 railroads were receiving Pullman service without a contract being in force, a perfect opportunity for some one else to go into the business, but no one wanted to. Complete occupation of the field is not unlawful monopoly unless that occupation includes the power to exclude others."

Mr. Pepper asserted that no one was being injured today and pointed out that no railroad had appeared to complain and no member of the public had raised any protest against the existing state of affairs. Since no injury is presently being done to the railroads or the traveling public and in view of the fact that there is no injury being done to other servicing companies—because there are none—Mr. Pepper concluded that the only other business which could possibly sustain injury is the business of the manufacturer who is not engaged in servicing.

"The manufacturers of cars that I will speak of as no-service cars," Mr. Pepper said, "are the lads that make five-sixths of the fleet of passenger cars in the country. Sleeping cars are only about one-sixth of the whole. But if any injury is being done to my good friend, Mr. Budd, by Pullman's way of doing business, it is because he finds it difficult to sell service cars minus service.

"If the court is going to restrain Pullman by divorcing manufacturing from servicing, it will be striking the first blow in judicial history at that which is the specific American way of doing business, and that is the integration of a great business."

Equipment Depreciation Orders

Equipment depreciation rates for the Akron, Canton & Youngstown and Spokane International have been prescribed by the Interstate Commerce Commission in recently-issued sub-orders in the general proceeding, Depreciation Rates for Equipment of Steam Railroad Companies. The composite percentage for all equipment of the A. C. & Y. is 3.97 per cent; for the S. I., 3.04 per cent.

I. C. C. Broadens Scope of Reopened N. Y. C.-Nicholson Case

The scope of the reopened No. 28162 proceeding involving the relationship between the New York Central and the Nicholson Universal Steamship Company, a Great Lakes line, has been broadened by the Interstate Commerce Commission to include the question of modifying the prior report's finding that "the interest of the New York Central in Nicholson Universal is such an interest as is contemplated by section 5(19) of the Interstate Commerce Act, and section 5(14) of the Transportation Act of 1940."

As noted in the *Railway Age* of December 26, 1942, page 1040, the further hearing was originally to be confined solely to the question of modifying the finding that "there is actual competition between the New York Central and Nicholson Universal." N. Y. C.'s interest in Nicholson came about through the relationship of N. Y. C. affiliates to the United States Freight Company; and the commission's prior report found that the situation constituted a violation of the so-called Panama-Canal-Act provisions of the Interstate Commerce Act.

News Department continued on second right-hand page

Construction

BALTIMORE & OHIO, NEW YORK CENTRAL.—The State Highway Department, Columbus, Ohio, has awarded a contract amounting to about $540,000 to Visintine & Co., Columbus, for the James Road grade crossing elimination project in that city. James Road, at present, crosses at grade a branch line and service tracks of the New York Central, the jointly used main tracks of the Baltimore & Ohio and the Pennsylvania; and, immediately north of the railroad tracks, it also crosses Fifth avenue at grade. Both James Road and Fifth avenue are access roads from Columbus to war industry plants and, as such, are heavily traveled. To relieve congestion and eliminate grade crossing hazards, Federal funds have been allocated to cover the entire cost of the project.

The work will consist of the relocation of James Road for approximately 4,000 ft., together with the construction of bridges carrying the highway over the tracks of the railroads, and over Fifth avenue. The structure carrying the highway over the railroads will consist of six spans 56, 70½, 55, 86 and 55 ft. long. They will be of continuous steel beam and reinforced concrete construction supported by reinforced concrete piers and abutments on piling. All spans will carry a highway roadway consisting of two 26-ft. lanes, separated by a dividing strip 4 ft. wide, and having sidewalks 6 ft. wide on the outside. To conserve critical materials, only the 70½ and the 70-ft. spans will be of steel girder construction. The remaining four spans will be of reinforced concrete construction.

Necessary changes in the facilities of the railroads will be made by the railroads' own forces.

The completion date for the entire project is December 31, 1943.

BIRMINGHAM TERMINAL COMPANY.—The Birmingham (Ala.) Terminal Company, jointly owned by the Southern, the St. Louis- San Francisco, and the Central of Georgia, has authorized an expenditure of $357,000 for replacement of an old detector type interlocking plant with a modern track circuit type, replacement of 85-lb. with 100-lb. rail, and improvements to the Fifth Avenue underpass.

NEW YORK CENTRAL.—This road is constructing two additional yard tracks, totaling approximately 5,200 ft. in length, in the Sharonville (Ohio) eastward classification yard.

NEW YORK CENTRAL.—The capacity of the New York Central yards at Mattoon, Ill., is being enlarged by the construction of approximately 7,300 ft. of track and four crossovers, with remote control of crossovers and two turnouts, at an estimated cost of $83,000.

NEW YORK CENTRAL.—This road has awarded a contract to R. G. Webster, Lockland, Ohio, for the construction of six additional yard tracks, totaling approximately 32,000 ft., at Bellefontaine, Ohio. Another contract has been awarded to the Walsh Construction Company, for the replacement of twelve 97-ft. engine stalls with 16 stalls at Bellefontaine. Of the new stalls 13 will be 130 ft., 2 will be 110 ft., and one 95 ft. in length.

WAR DEPARTMENT.—The U. S. Engineer office, Mobile, Ala., has awarded a contract amounting to less than $50,000 to the Shuptrine Construction Company, Centreville, Miss., for the construction of a detraining graded area and an end loading ramp in Kentucky. The U. S. Engineer office, Sacramento, Cal., has awarded a contract amounting to less than $50,000 to J. E. Haddock, Ltd., Pasadena, Cal., for the construction of spur tracks in California. The U. S. Engineer office, Buffalo, N. Y., has awarded a contract amounting to less than $50,000 to H. F. Stimm, Inc., Buffalo, for the construction of additional railroad tracks in New York.

Equipment and Supplies

WPB Releases Most of 20,000 Cars Planned for First Half of 1943

The War Production Board is reported to have granted authorizations for the building of 19,810 of the 20,000 cars planned for delivery during the first six months of 1943. Of this number, 4,585 were allocated to five railroad shops and 15,225 to seven contract car-builders. Although the 19,810 cars released included a number ordered in January, 1943, most of the cars to be built were on order but "frozen" at the year-end. The majority of the cars will be of composite wood and steel construction.

LOCOMOTIVES

C. & O. to Buy 25 Steam Locomotives

THE CHESAPEAKE & OHIO has issued inquiries for 25 steam road locomotives of 2-8-4 wheel arrangement with 21,000 gal. tenders.

THE BRODER COUNTY PORT AUTHORITY, Fort Lauderdale, Fla. (Port Everglades railroad), has ordered one Diesel-electric switching locomotive of 600 hp. from the Electro-Motive Corporation. War Production Board authorization for the immediate delivery of this locomotive has been received.

FREIGHT CARS

THE CHESAPEAKE & OHIO is reported to have ordered 1,500 hopper cars of 50 tons' capacity as follows: 500 from the Pullman-Standard Car Manufacturing Company; 500 from the American Car & Foundry Co. and 500 from the General American Transportation Corporation. It is reported that the railroad may place orders for an additional 1,500 cars of the same type.

Abandonments

"Superfluous branches we lop away, that bearing boughs may live."

ATCHISON, TOPEKA & SANTA FE.—This road has applied to the Interstate Commerce Commission for authority to abandon its 16.7-mile line extending from a point near Waveland, Colo., to a point near Cheraw.

NEW YORK CENTRAL.—Division 4 of the Interstate Commerce Commission has authorized this company to abandon a 0.539-mile segment of a branch within the corporate limits of Elkhart, Ind.

This company and the Michigan Central, lessor, have been authorized by Division 4 of the Interstate Commerce Commission to abandon operation of and to abandon, respectively, a line from Three Rivers, Mich., to a point near Niles, 29.14 miles.

OREGON, PACIFIC & EASTERN.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon a 2-mile logging branch along Layng Creek in Lane County, Ore.

PENNSYLVANIA - READING SEASHORE LINES.—This road has applied to the Interstate Commerce Commission for authority to abandon its Stone Harbor branch, extending from Cape May Courthouse, N. J., to Stone Harbor, 3.9 miles.

PENNSYLVANIA - READING SEASHORE LINES.—Division 4 of the Interstate Commerce Commission has authorized this company to abandon operation of, and the West Jersey & Seashore, lessor, to abandon, a branch from Daretown, N. J., to Oakland, 4.7 miles.

PENNSYLVANIA.—This road has filed with the Interstate Commerce Commission two applications seeking authority to abandon various branch lines and sections of branches in Pennsylvania. One application seeks authority to abandon the Lake Conewago branch, extending 1.35 miles from a connection with the Lebanon branch near Colebrook. The other seeks authority to abandon branches and parts of branches totaling approximately 12 miles. The lines are: Beaver Dam branch, 0.74 miles near Flinton; Bolivar branch, 0.97 miles near Bolivar; Brady Run branch, 0.65 miles near Glen Campbell; Whitney branch, 1.45 miles near Latrobe; Bens Creek branch, an 0.34-mile section in the vicinity of Portage; Hillman branch, a 1.51-mile section in the vicinity of Hillman; Martin branch, an 0.74-mile section near Portage; McGees branch, a 1.53-mile section in the vicinity of Hooverhurst; Pine Run branch, a 1.79-mile section near Irvona; South Forks branch, a 1.88-mile section in the vicinity of Ashtola.

ST. LOUIS-SAN FRANCISCO.—This road has applied to the Interstate Commerce Commission for authority to abandon its 5.9-mile line between Ash Grove, Mo., and Phenix.

News Department continued on second left-hand page

"GIT THAR FUSTEST

THIS terse declaration by Nathan Bedford Forrest, an outstanding general in the Civil War, is more true today than ever before.

It means, simply, that if we are to win this global war we must keep ahead of the enemy . . . beat him to the punch . . . by producing more . . . by delivering to our fighting forces more and more materials, equipment and supplies . . . and with the least possible delay. Time waits for no man. Every hour lost is a tribute to the enemy.

ELECTRO-MO

GENERAL MOTORS CORPORATION

T WITH THE MOSTEST'

It means, also, that from the time raw materials leave the ground until the finished products reach their destinations, maximum production must be maintained. Every available machine tool . . . every piece of rolling stock, especially locomotives, must be used to the very limit of its capabilities. A nation's production and fighting fronts are only as good as its transportation front. American railroads, with their millions of fighters on the home front, are meeting this challenge as never before because—

TRANSPORTATION IS VITAL TO VICTORY

D'VE DIVISION

LA GRANGE, ILLINOIS, U. S. A.

Supply Trade

J. C. Bloomfield, sales representative of the **Standard Car Truck Company,** Chicago, has been promoted to assistant to vice-president.

The Hyatt Bearings division of the General Motors Corporation, Harrison, N. J., was awarded the Army-Navy "E" for exceptional achievement in the production of war equipment.

A. W. Baker has been appointed transportation specialist of the Atlanta, Ga., transportation department of the **General Electric Company,** to succeed the late F. A. Kroner.

The Irving Subway Grating Company, Long Island City, N. Y., has received the Army-Navy "E" award for outstanding contribution to the war effort. The company is devoted almost entirely to producing portable emergency steel landing mats that can be laid down quickly to provide airfield runways.

Louis F. Theurer, industrial sales manager, Milwaukee (Wis.) Paint division of the **Pittsburgh Plate Glass Company,** has been appointed west coast divisional director, to succeed **Floyd S. Green,** who is retiring. **R. I. Ogle,** industrial paint sales representative in the Chicago territory, will succeed Mr. Theurer as industrial sales manager at Milwaukee.

Ceremonies at which the Army-Navy "E" award was presented to the Chicago works of the **Crane Company** were held at the plant on January 29. The presentation of the burgee was made by Rear Admiral Clark H. Woodward, U. S. N. (retired), chief of the Incentive division of the Navy department, while John H. Collier, president of Crane, accepted. Individual emblems were presented by Colonel J. F. Butler, chief of the Military Personnel branch of the 6th Service Command.

Charles H. Eisenhardt has been appointed assistant manager of the electrical, wire rope and construction materials sales division of the **American Steel & Wire Co.,** a United States Steel subsidiary, succeeding **R. L. Rhodes,** resigned. Mr. Eisenhardt has been associated with the wire company since May, 1925, when he was employed as a stenographer in the Baltimore, Md., sales office. He was successively a price clerk, correspondent and salesman in the Baltimore office before being assigned to the position of special sales representative in Washington, D. C., in August, 1942.

E. N. Sleight, acting manager of the Chicago office of the **Gustin-Bacon Manufacturing Company,** Kansas City, Mo., has been promoted to manager in charge of sales in the Chicago area. Mr. Sleight graduated from Purdue University in 1931 and after acting as a football coach and being employed by the Association of American Railroads in connection with research work on chilled steel car wheels and brake shoes entered the employ of Gustin-Bacon at Kansas City in May, 1937. Later that year he was assigned to the Chicago office as a sales representative and in November, 1941, was appointed acting manager of the Chicago office.

Record-breaking shipments of tanks during December, more than trebling those of any preceding month and necessitating working 24 hours a day, every day during the month, including Sundays and Christmas day, were made from the Hammond, Ind., plant of the **Pullman-Standard Car Manufacturing Company,** according to Wallace N. Barker, vice-president. The peak tank movements were in response to a special request from the office of the chief of ordnance, which department sent a message commending both the company and employees, "for the splendid push you demonstrated during the Christmas season, when you laid on the line the quantity of finished tanks you did."

Financial

ATCHISON, TOPEKA & SANTA FE.—*Lease of Subsidiaries.*—The Interstate Commerce Commission, Division 4, has issued a supplemental report in Finance Docket No. 4273, authorizing the Gulf, Colorado & Santa Fe to execute new leases, dated January 1, 1943, of the properties of the Cane Belt; Concho; San Saba & Llano Valley; Fort Worth & Rio Grande; Gulf & Inter-State of Texas; Gulf, Beaumont & Great Northern; Gulf, Beaumont & Kansas City; Healdton & Santa Fe; Jasper & Eastern; Texas & Gulf; and part of the Pecos & Northern Texas. The new leases will provide for depreciation accruals in accordance with the commission's order effective January 1.

BALTIMORE & OHIO.—*Accepts Tenders.*—R. B. White, president of the Baltimore & Ohio, on January 28 announced that the railroad had accepted tenders covering $29,275,650 principal amount of its bonds and notes under the invitation issued December 21, 1942. Acceptance covered 17 different issues, tendered at an aggregate price of $12,898,120 or an over-all average price of $44.06 per $100 principal amount. All of the accepted tenders have been assigned to New York Transit & Terminal Co., Ltd., a subsidiary of the B. & O.

DETROIT & MACKINAC.—*Extension of Collateral Deposit.*—Division 4 of the Interstate Commerce Commission has extended to December 31, 1943, this company's authority to pledge $375,000 of mortgage bonds as collateral for short-term indebtedness.

ILLINOIS CENTRAL.—*Loan Maturity.*—Division 4 of the Interstate Commerce Commission has approved conditionally this company's application for extension of the time of payment of its loan of $25,140,000 from the Reconstruction Finance Corporation from May 31, 1944, to May 31, 1949, and also to permit release of 199,985 shares of Central of Georgia stock pledged as part collateral for this loan. It is required that collateral pledged under the loan shall always be at least 135 per cent of the principal, and that sinking fund payments of at least 2 per cent of the principal amount of the note shall be made annually.

MIDLAND VALLEY.—*Debt Adjustment Plan.*—This road has applied to the Interstate Commerce Commission for approval of a debt-adjustment plan to be effected under the provisions of the McLaughlin Act (i. e., the revived "Chandler Act"). The plan contemplates the extension from April 1, 1943, to April 1, 1963, of the maturity date on $4,750,000 of first mortgage bonds, while the maturity of the Series A adjustment bonds in the amount of $1,475,500 and Series B's in the amount of $830,500 would also be extended to the same date, i. e., 10 years from their present April 1, 1953, maturity date. The plan further provides for a reduction in interest on the bonds from five to four percent and for the establishment of a sinking fund. The application states that the April 1 maturity is the "only financial problem" of the applicant which has had earnings on its stock in all except three years since 1921.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—*Reorganization Plan Submitted to Creditors.*—The Interstate Commerce Commission on February 3 announced that, on January 18, Division 4 had ordered this roads' reorganization plan, as approved by the commission and the court, submitted to the creditors for acceptance or rejection under the provisions of section 77 of the Bankruptcy Act.

MISSOURI PACIFIC.—*Gulf Coast Lines Trackage Rights.*—This company's subsidiaries, the New Orleans, Texas & Mexico and the Beaumont, Sour Lake & Western, have applied to the Interstate Commerce Commission for authority to enter into a 15-year agreement as of January 31, 1937, for operation under trackage rights on the Kansas City Southern from De Quincy, La., to Beaumont, Tex., continuing an arrangement in effect since 1905.

Average Price of Stocks and Bonds

	Feb. 2	Last week	Last year
Average price of 20 representative railway stocks..	30.93	30.39	29.11
Average price of 20 representative railway bonds..	71.75	70.96	66.10

Dividends Declared

Bangor & Aroostook.—$5.00 Preferred (Accum.), $1.25, payable March 10 and April 1 to holders of record February 10 and March 8, respectively.

Cleveland & Pittsburgh.—88c, quarterly; Special, 50c, quarterly, both payable March 1 to holders of record February 10.

Erie.—$5.00 Preferred, $1.25, quarterly, payable March 1, June 1, September 1 and December 1 to holders of record February 19, May 22, August 21 and November 20, respectively.

Green Bay & Western.—Common, $5.00, payable February 18 to holders of record February 6; Income debenture A, $50.00; Income debenture B, $10.00, both payable February 18.

Maine Central.—6 Per Cent Prior Preferred (Accum.), $3.00, payable February 5 to holders of record February 1.

Michigan Central.—$25.00, semi-annually, payable January 30 to holders of record January 21.

Reading.—4 Per Cent Non-Cumulative First Preferred, 50c, quarterly, payable March 11 to holders of record February 18.

Railway Officers

EXECUTIVE

William D. Wiggins, chief engineer of the Pennsylvania system, with headquarters at Philadelphia, Pa., has been promoted to vice-president—engineering.

C. W. Wright, whose election as vice-president and general counsel of the Minneapolis & St. Louis, with headquarters at Minneapolis, Minn., was reported in the *Railway Age* of January 30, was born at Mineral Point, Wis., on August 28, 1886, and graduated from the University of Wisconsin with a Bachelor of Laws degree in 1909. He practiced law in St. Paul, Minn., from 1909 to 1918 and in 1919, became attorney at Minneapolis for the Chicago, Milwaukee, St. Paul & Pacific. In 1922 Mr. Wright went with the M. & St. L. as general attorney and on February 16, 1932, he was appointed counsel for the receiver. In June, 1939, he was appointed counsel for the reorganization manager, which position he held until his recent appointment.

C. W. Wright

Herbert Godwin Gordon, whose appointment as assistant to the vice-president and general manager of the Central region of the Canadian National at Toronto, Ont., succeeding **Charles F. Needham,** retired, was announced in the *Railway Age* of January 23, was born at Montreal, Que. Mr. Gordon has been identified with the Grand Trunk and the Canadian National for more than 30 years. He commenced his railway career as a clerk in the operating department and has since served in various capacities in the engineering department and in the office of the vice-president and general manager. On June 1, 1938, Mr. Gordon became chief clerk at Toronto, in which position he remained until his recent appointment as assistant to the vice-president and general manager at that point.

Mr. Needham retired from active railway service to accept the position of associate director of National Selective Service (Civilian), at Ottawa, Ont. Born on December 9, 1877, at London, Ont., he entered railroad service in 1898 as an employee in the maintenance of way department of the Grand Trunk (now Canadian National), later serving in the divisional office of the motive power department for seven years.

Herbert Godwin Gordon

He was employed in the system motive power department office for 14 years, during which time he served as stenographer, head timekeeper, accountant, chief clerk and special assistant to the vice-president in charge of the motive power and car departments, respectively. Subsequently, in 1920, he was appointed assistant to the general superintendent of motive power and car departments, and from January to March, 1923, served as acting assistant to the operating manager at Montreal, becoming assistant to the general manager of the Canadian National at Toronto on the latter date. Remaining at Toronto, he was appointed assistant to the vice-president and general manager of the Central region of the Canadian National in 1934.

John W. Devins, whose election as vice-president and general manager of the Minneapolis & St. Louis, with headquarters at Minneapolis, Minn., was reported in the *Railway Age* of January 30, was born at Harvard, Ill., on February 12, 1890. He entered railroad service in 1909 as a freight department clerk of the Chicago & North Western at Janesville, Wis., and two years later he became a stenographer of the Chicago, Milwaukee & St. Paul (now the Chicago, Milwaukee, St. Paul & Pacific) until 1913 when he served as an accountant of the Railway Transfer Company, Minneapolis, a subsidiary of the M. & St. L. In 1914 Mr. Devins joined the M. & St. L. and served as yard clerk, yard brakeman, yard conductor, yardmaster, trainmaster, assistant superintendent and division superintendent at various points on the road. In October, 1933, he was advanced to assistant to the general manager, with headquarters at Minneapolis, becoming acting general manager in September, 1934. On April 1, 1935, Mr. Devins was promoted to general manager with the same headquarters, holding that position until his new appointment.

John W. Devins

John J. O'Brien, whose election as vice-president and secretary of the Minneapolis & St. Louis, with headquarters at New York, was reported in the *Railway Age* of January 30, was born at Brooklyn, N. Y., on November 4, 1888, and attended St. John's college, Brooklyn, and the Pace Institute of Accounting, New York. In 1913 he became office manager and accountant of W. H. Coverdale & Co., (now Coverdale & Colpitts) New York. He entered railroad service as assistant secretary and assistant treasurer of the Pittsburgh & West Virginia in 1917, and in 1930 was appointed assistant secretary of the Seaboard Air Line, being elected a director in 1938. In that year Mr. O'Brien became secretary of the reorganization committee of the M. & St. L., the position he held at the time of his new promotion on January 21.

John J. O'Brien

Herbert W. Ward, whose election as vice-president and general traffic manager of the Minneapolis & St. Louis, with headquarters at Minneapolis, Minn., was reported in the *Railway Age* of January 30, was born at Spooner, Wis., on April 24, 1894. He attended the Minnesota College of Law, receiving the degree of L.L.B. in 1934, and was admitted to the bar in October of the same year. He began railway service in October, 1908, as a clerk in the tariff department of the M. & St. L. Two years later he went with the Chicago, St. Paul, Minneapolis & Omaha as a clerk in the local freight office at Minneapolis,

and then served from 1911 to 1924 as a brakeman and freight conductor. He returned to the traffic department of the Omaha in 1924 as traveling freight and passenger agent at Duluth, Minn., and became city freight agent at Minneapolis in 1930. He was appointed general freight agent in charge of solicitation for the M.

Herbert W. Ward

& St. L. in March, 1935, and was made acting traffic manager in April, 1936. He became traffic manager in August of that year, and in April, 1938, he was promoted to general traffic manager. Mr. Ward is a director of the Traffic Club of Minneapolis and has been admitted to practice before Minnesota State Courts, U. S. Courts, and the Interstate Commerce Commission.

OPERATING

L. White has resumed the duties of trainmaster of terminals of the Texas & Pacific at Texarkana, Tex.

F. S. Worthington has been appointed trainmaster of the Southern, with headquarters at Columbia, S. C., succeeding **L. L. Waters,** transferred.

C. L. Bakke, general superintendent of the Chicago, Rock Island & Pacific at El Reno, Okla., has been transferred to Kansas City, Mo., succeeding **Charles L. Franklin,** who, in turn, has been transferred to El Reno, replacing Mr. Bakke.

R. K. Ort has been appointed trainmaster of the Pennsylvania division of the New York Central, and **F. S. Farnham** has been appointed trainmaster of the Syracuse division, with headquarters at Jersey Shore, Pa., and Syracuse, N. Y., respectively.

William P. Lamb, superintendent of the Indiana Harbor Belt, with headquarters at Gibson, Ind., has retired after 52 years' service with the New York Central system. Mr. Lamb was born at Lafayette, Ind., in 1873, and entered railroad service on April 11, 1890, as a car accountant clerk of the Cleveland, Cincinnati, Chicago & St. Louis (now a part of the New York Central) at Indianapolis. He held various other positions until 1908 when he was promoted to chief clerk to the vice-president of the N. Y. C. with headquarters at Chicago. On May 18, 1918, Mr. Lamb was advanced to assistant superintendent with the same headquarters and subsequently served as superintendent at Elkhart, Ind., Gibson; Toledo, Ohio, and Chicago. On April 1, 1937, he was appointed to the position he held at the time of his retirement.

C. K. Carter, Jr., trainmaster of the Southern at Greensboro, N. C., has been appointed superintendent of the Georgia Southern & Florida, with headquarters at Macon, Ga., succeeding **D. W. Brosnan,** whose transfer to the Alabama Great Southern and the Woodstock & Blocton, with headquarters at Birmingham, Ala., was announced in the *Railway Age* of January 30.

W. T. Long, Jr., whose leave of absence as superintendent of transportation of the Texas & Pacific to become deputy associate director, Office of Defense Transportation, was reported in the *Railway Age* of June 20, 1942, has resumed his duties with the T. & P. **H. C. Remington,** who assumed the duties of Mr. Long during the latter's absence, has been appointed assistant superintendent of transportation, with headquarters as before at Dallas.

David E. Smucker, assistant superintendent of freight transportation of the Pennsylvania, Western region, with headquarters at Chicago, has been promoted to superintendent of the Indianapolis division, with headquarters at Indianapolis, Ind., succeeding **Berkeley Ward, Jr.,** who has been appointed assistant to the general superintendent at Chicago. Mr. Smucker was born at West Liberty, Ohio, on October 3, 1907, and graduated in civil engineering from Ohio State University in June, 1929. He entered railway service on May 23, 1929, as an assistant on the engineer corps of the Pennsylvania.

David E. Smucker

On August 1, 1929, he was promoted to assistant supervisor at Harrington, Del., and later served in that capacity successively at Lemoyne, Pa., Washington, D. C., and Philadelphia, Pa. Mr. Smucker was promoted to supervisor of track, with headquarters at Clayton, Del., on April 9, 1934, and on October 10, 1935, he was transferred to Perryville, Md. In August, 1940, he was advanced to assistant division engineer at Ft. Wayne, Ind., and in October, 1940, he was promoted to division engineer of the Toledo division, with headquarters at Toledo, Ohio. Mr. Smucker was appointed assistant superintendent of freight transportation, Western region, with headquarters at Chicago, in January, 1942, which position he held until his recent promotion, effective January 16.

FINANCIAL, LEGAL AND ACCOUNTING

The board of directors of the Lehigh & Hudson River has elected **Robert I. Huyler** secretary and treasurer of that road, with headquarters at Warwick, N. Y., succeeding **William H. Sayer,** who has resigned from that position.

John P. Gaffrey, has been appointed freight claim agent of the Illinois Terminal, with headquarters at St. Louis, Mo., succeeding **C. F. Handshy,** whose death on November 18 was reported in the *Railway Age* of November 28.

A. H. Bradford, assistant auditor of agencies of the Canadian Pacific, has been promoted to auditor of agencies, succeeding **J. S. Hickey,** whose death on January 12 was reported in the *Railway Age* of January 23. **E. Blackburn,** chief traveling auditor, has been appointed assistant auditor of agencies, succeeding Mr. Bradford. Both Mr. Bradford and Mr. Blackburn will maintain headquarters at Montreal, Que.

TRAFFIC

William J. O'Donnell, traveling freight agent of the Atchison, Topeka & Santa Fe, with headquarters at New York, has been promoted to general agent at Peoria, Ill., succeeding **O. H. Thomas,** who retired on February 1.

H. F. Biallas, general agent of the Chicago Great Western, with headquarters at Milwaukee, Wis., has been transferred to New York, succeeding to the duties of **T. G. Kees,** general eastern agent whose promotion to eastern traffic manager was reported in the *Railway Age* of January 16.

L. Shannon Cook, assistant general freight agent of the Chicago, Rock Island & Pacific at Denver, Colo., has been promoted to general freight agent, with the same headquarters, a newly created position, and **W. C. Sutton,** traveling freight agent at Denver, has been promoted to general agent at that point. **Milton H. Booth,** formerly traveling freight agent at Colorado Springs, Colo., who has been on a leave of absence since February, 1942, has been appointed general agent at Colorado Springs.

D. C. Richardson, whose promotion to freight claim agent of the New York Central (Big Four), with headquarters at Indianapolis, Ind., was reported in the *Railway Age* of January 16, was born at Cincinnati, Ohio, in 1876. He entered railroad service in October, 1890, as a clerk of the freight claim department of the Big

News Department continued on next left-hand page

Prevent Destructive Pounds

Power Is Needed For Victory

DON'T expect high monthly mileage from locomotives with pounding boxes. Prevention is far less costly than repairs.

Shoes and Wedges made from HUNT-SPILLER *Air Furnace* GUN IRON are helping many railroads to prevent destructive driving box pounds.

Their unusual resistance to frictional wear is proven by the fact that locomotives equipped require fewer wedge adjustments.

By preventing driving box pounds, H S G I Shoes and Wedges increase the service life of many parts and thus help to keep power on the road to Victory.

H S G I
Reg. U. S. Trade Mark
Cylinder Bushings
Cylinder Packing Rings
Pistons or Piston Bull Rings
Valve Bushings
Valve Packing Rings
Valve Bull Rings
Crosshead Shoes
Hub Liners
Shoes and Wedges
Floating Rod Bushings
Finished Parts
Dunbar Sectional Type Packing
Duplex Sectional Type Packing
for Cylinders and Valves
(Duplex Springs for Above
Sectional Packing)
Cylinder Snap Rings
Valve Rings, All Shapes
Light Weight Valves
Cylinder Liners and Pistons
for Diesel Service

HUNT-SPILLER MFG. CORPORATION
V. W. Ellet, *President* — E. J. Fuller, *Vice-Pres. & Gen. Mgr.*
383 Dorchester Ave. *Office & Works* South Boston, Mass.
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International Rwy. Supply Co., 30 Church Street, New York, N. Y.

HUNT-SPILLER GUN IRON
Air Furnace

Four at Cincinnati, and when the department was moved to Indianapolis in 1915, was advanced to traveling claim agent, with headquarters at Indianapolis. In 1933 Mr. Richardson was promoted to district claim agent at Cincinnati, holding that position until his new appointment, effective January 1.

ENGINEERING & SIGNALING

S. A. Cooper, resident engineer of the Gulf, Mobile & Ohio, with headquarters at Mobile, Ala., has taken over the duties of **J. R. Harris,** assistant engineer at Mobile, has received a commission as lieuten- **J. W. Wolfe,** assistant engineer at Mobile, has received a commission as lieutenant, junior grade, in the U. S. Navy and his duties have been assigned to others.

Harry F. Kimball, instrumentman on the Chicago, Burlington & Quincy at St. Joseph, Mo., has been promoted to division engineer, with headquarters at Hannibal, Mo., succeeding **C. C. Robnett,** who has been transferred to St. Joseph. Mr. Robnett replaces **Roger H. Johnston,** whose death on January 14 was reported in the *Railway Age* of January 30.

Allen C. Knowles, assistant engineer of structures of the Erie, has been promoted to engineer of structures, with headquarters as before at Cleveland, Ohio, succeeding **Frank A. Howard,** who has been appointed consulting engineer of structures, with the same headquarters. **H. A. Dise** has been appointed assistant engineer of structures, succeeding Mr. Knowles.

John L. Gressitt, assistant chief engineer—maintenance, of the Pennsylvania system, has been promoted to chief engineer of the system, with headquarters as before at Philadelphia, Pa., succeeding **William D. Wiggins,** whose promotion to vice-president—engineering is noted elsewhere in these columns. **Samuel Reed Hursh,** chief engineer, maintenance of way, of the Eastern region at Philadelphia, has been appointed to succeed Mr. Gressitt as assistant chief engineer—maintenance. **C. F. Trowbridge,** division engineer on special duty in the office of the chief of freight transportation at Philadelphia, has been promoted to assistant chief engineer of the system. **W. R. Parvin,** engineer, maintenance of way, on the Southwestern division at Indianapolis, Ind., has been appointed chief engineer, maintenance of way, of the Eastern region, succeeding Mr. Hursh, while **E. D. Flad,** engineer, maintenance of way, on the Southern division at Wilmington, Del., has been transferred to the Southwestern division, succeeding Mr. Parvin. **P. X. Geary,** division engineer on the Philadelphia division at Harrisburg, Pa., succeeds Mr. Flad as engineer, maintenance of way, on the Southern division. Mr. Gressitt was born at Baltimore, Md., on April 4, 1887, and was educated at the Baltimore Polytechnic Institute and at Lehigh university, graduating from the latter school with a degree in civil engineering. He entered railway service on August 4, 1908, with the engineering corps on the Pittsburgh division of the Pennsylvania, being advanced through the positions of chainman, rodman and transitman. On May 1, 1915, he was promoted to assistant supervisor of track on the Bellwood division, later being transferred to Williamsport, Pa., and then to Philadelphia. From October 1, 1917, to July 10, 1919, he was in military service with the 21st Engineers, and upon his return to the Pennsylvania, he was appointed acting supervisor on the Monongahela division, later being promoted to supervisor, in which capacity he served during the next seven years successively on the Monogahela, Philadelphia Terminal and Pittsburgh divisions. He was promoted to division engineer on the Fort Wayne division on January 16, 1927, being further advanced to superintendent on the Sunbury division, with headquarters at Sunbury, Pa., on December 1, 1929. On June 1, 1931, he was transferred to the St. Louis division at Terre Haute, Ind., and on November 1, 1931, he was promoted to general superintendent on the Southwestern division, with headquarters at Indianapolis. Mr. Gressitt was transferred to Chicago two years later, and on January 1, 1936, he was promoted to chief engineer, maintenance of way, of the Western region, with the same headquarters. Mr. Gressitt held that position until October 1, 1940, when he was promoted to assistant chief engineer, maintenance of way, with headquarters at Philadelphia, the position he was holding at the time of his recent promotion.

John L. Gressitt

MECHANICAL

Frank Kurz, assistant fuel engineer of the Southern Pacific at San Francisco, Cal., has been promoted to fuel engineer with the same headquarters, replacing **R. S. Twogood,** who died in the Southern Pacific hospital at San Francisco on January 16.

Clarkson T. Hunt, master mechanic of the Philadelphia division of the Pennsylvania at Harrisburg, Pa., has been appointed superintendent of motive power of the Southwestern division with headquarters at Indianapolis, Ind. **C. W. Whistler, Jr.,** master mechanic of the Philadelphia terminal division at Philadelphia, Pa., has been transferred to the Philadelphia division, succeeding Mr. Hunt, and **C. I. Clugh,** acting chief inspector in the test department of the Altoona works, has been appointed to succeed Mr. Whistler as master mechanic of the Philadelphia terminal division.

F. N. Burch, assistant master mechanic of the Macon (Ga.) shops of the Central of Georgia, has been promoted to master mechanic of the Macon shops, succeeding **Thomas Alexander Johnson,** whose death is noted elsewhere in these columns. **J. W. Mason,** foreman of the erecting shop at Macon, has been appointed assistant master mechanic at that point, succeeding Mr. Burch.

H. C. McCullough, master mechanic of the Chicago, Rock Island & Pacific at Silvis, Ill., has been promoted to superintendent of motive power of the Second Mechanical district, with headquarters at Kansas City, Mo., succeeding **Bert H. Smith,** who retired on February 1. **R. E. Detrick,** master mechanic at Armourdale, Kan., has been transferred to Silvis, replacing Mr. McCullough, and **C. E. Farley,** master mechanic at Des Moines, Iowa, has been transferred to Armourdale, relieving Mr. Detrick. **F. J. Schleihs,** master mechanic at Dalhart, Tex., has been transferred to Des Moines, succeeding Mr. Farley, and **H. J. Crowley,** road foreman of equipment on the Missouri-Kansas division, has been promoted to master mechanic at Dalhart, replacing Mr. Schleihs.

Mr. Smith entered railroad service on September 1, 1894, as a machinist apprentice of the Northern Pacific at Brainerd, Minn. In May, 1904, he became roundhouse foreman of the Atchison, Topeka & Santa Fe at Chicago, and one year later was advanced to division foreman, with headquarters at Marceline, Mo., later being transferred to Emporia, Kan. In 1907 he became a representative of a railway supply company, and in October, 1908, was appointed general foreman of the Chicago, Rock Island & Pacific at Caldwell, Kan. From March, 1911, to October, 1914, Mr. Smith was general foreman of the Kansas City, Mexico & Orient, (now controlled by A. T. & S. F.) going to the Rock Island in a similar capacity at Fairbury, Neb., in 1918. Later he served as master mechanic at various points including Estherville, Iowa; Horton, Kan.; Little Rock, Ark., and Des Moines. In March, 1940, Mr. Smith was advanced to the position he held at the time of his retirement.

Oscar G. Pierson, mechanical superintendent of the Eastern district of the Eastern lines of the Atchison, Topeka & Santa Fe, with headquarters at Fort Madison, Iowa, has been promoted to mechanical superintendent of the Gulf, Colorado & Santa Fe, with headquarters at Galveston, Tex., succeeding **J. E. McQuillen,** who retired on January 30. **W. D. Hartley,** mechanical superintendent of the Northern district, Western Lines, of the Santa Fe at La Junta, Colo., has been transferred to Fort Madison, relieving Mr. Pierson, and **P. J. Danneberg,** master mechanic at Argentine, Kan., has been ad-

News Department continued on third right-hand page

vanced to mechanical superintendent at La Junta, replacing Mr. Hartley. **James W. Atkinson,** master mechanic at Fort Madison, has been transferred to Argentine, succeeding Mr. Danneberg, and **G. D. Jones,** master mechanic at Chanute, Kan., has been transferred to Fort Madison, relieving Mr. Atkinson. **Harrison L. Price,** superintendent of the Chicago car works, has been appointed master mechanic at Chanute, replacing Mr. Jones, and **Fred Wire,** general car foreman at Argentine, has been advanced to superintendent of the Chicago car works, succeeding Mr. Price.

Mr. Pierson was born at Topeka, Kan., on June 1, 1889, and entered railway service on April 30, 1907, as a machinist apprentice on the Santa Fe at Topeka. On April 1, 1912, he was promoted to foreman of the air brake room and two years later he was transferred to Argentine, as machinist gang foreman. On February 20, 1916, he was promoted to night roundhouse foreman at Arkansas City, Kan., and a year later was transferred to Argentine. Mr. Pierson resigned in December, 1917, to accept work in the Navy Yard at

Oscar G. Pierson

Washington, D. C., and on January 4, 1919, returned to the Santa Fe as a machinist at Argentine. From June 19, 1919, until November 1, 1920, he served successively as machinist gang foreman, air brake foreman, and roundhouse foreman at Argentine. On the latter date he was promoted to general foreman at Arkansas City, and on September 1, 1937, he was advanced to master mechanic of the Oklahoma and Southern Kansas division. On July 15, 1939, Mr. Pierson was promoted to mechanical superintendent with headquarters at Fort Madison, the position he held until his recent promotion.

Mr. McQuillen was born at Rochester, N. Y., on January 25, 1873, and attended the Sacred Heart Academy, Palestine, Tex. He entered railway service in October, 1887, with the International-Great Northern as a roundhouse caller, later serving as a machinist apprentice on the I-G. N. and a machinist, foreman and general foreman in various railroad shops in the United States and Mexico. In September, 1901, he went with the G. C. & S. F. as a machinist at Temple, Tex., later being advanced to roundhouse gang foreman. In December, 1902, he was promoted to general foreman at Gainesville, Tex., and in November, 1906, he was advanced to master mechanic at Silsbee, Tex. In August, 1913, Mr. McQuillen was promoted to mechanical superintendent, with

P. J. Danneberg

headquarters at Cleburne, Tex. His headquarters were later transferred to Galveston.

Mr. Danneberg was born at Argentine, Kan., on October 12, 1894, and entered railroad service in 1909 as a wheel checker of the Santa Fe at Argentine. He subsequently served as machinist, assistant roundhouse foreman, machinist gang foreman and roundhouse foreman and in 1922 was advanced to general locomotive foreman at Argentine. In 1937 Mr. Danneberg was promoted to master mechanic at Slaton, Tex., being transferred to Clovis, N. M., in 1939, to Winslow, Ariz., later in 1939, and to Argentine in 1941, at which point he was located until his new appointment effective February 1.

SPECIAL

Donald E. Mumford has been appointed assistant general safety agent of the New York Central System, and **Edward G. Senger** has been appointed assistant to the general safety agent. Mr. Mumford and Mr. Senger will maintain headquarters at New York.

Howard O. Noack, superintendent of dining cars of the Southern at Chattanooga, Tenn., has been promoted to assistant manager of dining cars, with headquarters at Washington, D. C. **Fred C. Thomas,** dining car agent at Columbia, S. C., has been promoted to succeed Mr. Noack as superintendent of dining cars at Chattanooga, and **Loyd M. Caldwell,** inspector at Atlanta, Ga., has been appointed assistant superintendent of dining cars at Atlanta. Mr. Noack has been employed in the dining car department of the Southern since 1920 and had been located in Chattanooga since August 1, 1942, when he was transferred to that city from Washington, D. C.

Mr. Thomas entered the service of the Southern in 1919 as a dining car steward, and at various times since has been located at Charlotte, N. C., Washington, Knoxville, Tenn., and Columbia, as steward, dining car agent and inspector.

Mr. Caldwell was first employed in the Southern's dining car department in 1922 as an assistant in the store room at Charlotte. He was promoted to steward in 1932, to dining car agent on April 1, 1935, and to inspector on March 16, 1937.

PURCHASES AND STORES

E. J. Leonard, traveling storekeeper of the Chicago & North Western, has been promoted to assistant general storekeeper, with headquarters as before in Chicago, succeeding W. L. Wheeler, whose death was reported in the *Railway Age* of January 30.

T. J. Ruth has been appointed acting purchasing agent of the Minneapolis, St. Paul & Sault Ste. Marie, the Duluth, South Shore & Atlantic and the Mineral Range, with headquarters at Minneapolis, Minn., succeeding **Jesse B. Boyes,** purchasing agent and general storekeeper, who retired on January 1. **T. F. Lynch** has been appointed general storekeeper of the Soo Line, also with headquarters at Minneapolis.

OBITUARY

Thomas Alexander Johnson, master mechanic of the Central of Georgia shops at Macon, Ga., died at a hospital at Macon on January 24, at the age of 56.

J. N. Lemon, division passenger agent of the New York Central, with headquarters at Indianapolis, Ind., died on January 24 in that city.

M. B. McBride, who retired in 1939 as manager and auditor of the Cowlitz, Chehalis & Cascade, with headquarters at Chehalis, Wash., died on January 26, at Seattle, Wash.

E. A. Lalk, assistant general freight agent of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Milwaukee, Wis., died at that city on February 2, following a long illness.

Frank L. Koontz, who retired in 1931 as seretary and treasurer of the Elgin, Joliet & Eastern, died on January 30, at his home in San Diego, Cal. Mr. Koontz became chief claim clerk of the E. J. & E. on May 1, 1900, and in 1907 was promoted to assistant secretary and assistant treasurer. On November 13, 1913, he was advanced to the position he held at the time of his retirement.

William L. Barnes, who retired in 1928 as general superintendent of transportation of the Chicago, Burlington & Quincy, died on January 28, at La Grange, Ill. He entered railroad service with the Burlington as a station helper at Kirkwood, Ill., in 1873, subsequently holding several positions, including chief dispatcher at Galesburg, Ill., and superintendent of special freight and car service with headquarters at Chicago. In June, 1904, Mr. Barnes was promoted to the position he held at the time of his retirement.

KRANE KAR
SWING BOOM CRANE

CONDENSED SPECIFICATIONS OF

WPB APPROVED MODELS

IN ACCORD WITH
LIMITATION ORDER L-112

SPECIFICATIONS	MODEL A*	MODEL AX	MODEL AY
Capacity { At 5 ft. from Front Axle / At 3½ ft. from Bumper }	5,000 lbs.	10,000 lbs.	20,000 lbs.
Capacity { At 10 ft. from Front Axle	2,500 lbs.	5,000 lbs.	10,000 lbs.
Boom, Telescopic	12 to 18 ft. (a)	12 to 18 ft. (a)	12 to 18 ft. or 19 to 31 ft. (a)
Speed, Traveling { 4 Speeds Fwd	Up to 15 mi./hr.	Up to 12 mi./hr.	Up to 10 mi./hr.
Speed, Traveling { 1 Speed Rev	2 mi./hr. (b)	1¾ mi./hr. (b)	1¼ mi./hr. (b)
Hoisting, Hook Speed { High Gear	50 to 80 ft./min.	35-55 ft./min.	15-25 ft./min.
Hoisting, Hook Speed { Low Gear	30-50 ft./min.	20-35 ft./min.	10-15 ft./min.
Boom Topping, Horiz. to Max. Vertical	8 Seconds	10 Seconds	12 Seconds
Boom Swing, 180 Degrees, High Gear	15 Seconds	20 Seconds	25 Seconds
Engine, For Travel & Crane Operations	25-50 H-P Gasoline (c)	25-50 H-P Gasoline (c)	25-50 H-P Gasoline (c)
Width, over-all { Solid Tires	5 ft. 6 in.	6 ft. 2 in.	7 ft. 6 in.
Width, over-all { Pneumatic Tires	7 ft. 2 in. (d)	8 ft. 5 in.	9 ft. 3 in.
Length, (exclusive of Boom) { Solid Tires	10 ft. 8 in.	11 ft. 2 in.	13 ft. 5 in.
Length, (exclusive of Boom) { Pneumatic Tires	11 ft. 7 in. (d)	12 ft. 5 in.	14 ft. 8 in.
Height, over-all (with Boom lowered) { Solid Tires	7 ft. 0 in.	7 ft. 7 in.	8 ft. 10 in.
Height, over-all (with Boom lowered) { Pneumatic Tires	7 ft. 4 in. (d)	7 ft. 11 in.	9 ft. 5 in.
Weight, Complete with Std. Equipment	15,000 lbs.	21,000 lbs.	35,000 lbs.

* Production of Model A has decreased in favor of Model AX. In line with WPB recommendations for a minimum of types, Model A may be discontinued for the Duration. Model AX should be considered instead.

(a) One piece booms and other boom lengths are also available, if required.

(b) An Auxiliary Reverse Transmission for high speed traveling in reverse, is available, if specified; provides all forward speeds also in reverse.

(c) Diesel Engine of same size is available, if specified.

(d) Pneumatic Tires used for Model A are NOT WPB Approved Standard Size; Model AX should be considered instead.

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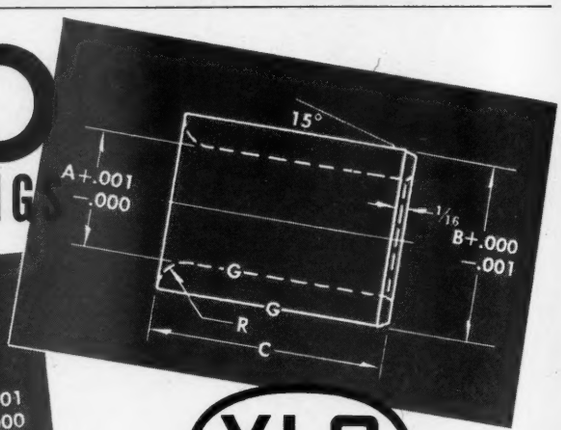
Agents in Principal Cities

SILENT HOIST WINCH & CRANE CO. 845 63rd STREET, BROOKLYN, N. Y.

EX-CELL-O

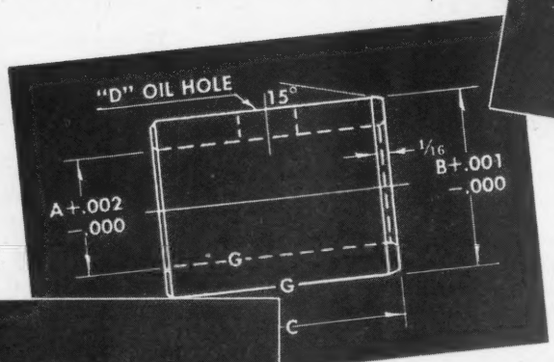
RAILROAD PINS AND BUSHINGS

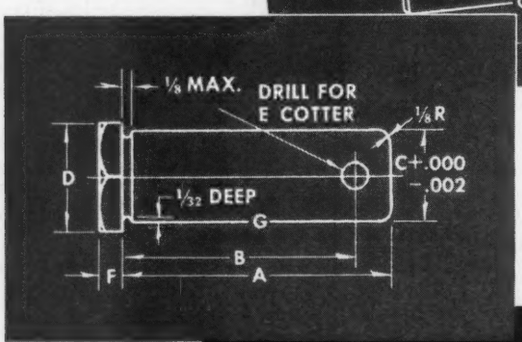


Upper right diagram: **Ex-Cell-O R.R. Bushing, Style No. 3.**

Center diagram: **Ex-Cell-O R.R. Bushing, Style No. 1 (with oil hole). Style No. 2 (without oil hole).**

Below: Ex-Cell-O R.R. Pin.





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EX-CELL-O *means* PRECISION

...for the greatest service today... and tomorrow!

Railroad Division **EX-CELL-O CORP.** *Detroit, Michigan*